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*Australia,*  
COMMONWEALTH BUREAU OF CENSUS AND STATISTICS,  
CANBERRA.

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OFFICIAL

# YEAR BOOK

OF THE

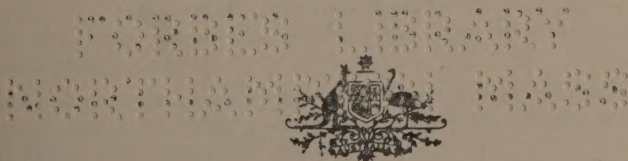
## COMMONWEALTH OF AUSTRALIA

No. 35.—1942 and 1943.

Prepared under Instructions from  
The Honorable the Treasurer,

BY

S. R. CARVER,  
ACTING COMMONWEALTH STATISTICIAN.



BY AUTHORITY :

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## PREFACE.

By the Constitution of the Commonwealth of Australia, the Parliament of the Commonwealth is empowered "to make laws for the peace, order, and good government of the Commonwealth, with respect to Census and Statistics." In the exercise of the power so conferred, a "Census and Statistics Act" was passed in 1905, and in the year following, the "Commonwealth Bureau of Census and Statistics" was created. The first Official Year Book was published early in 1908. The publication here presented is the thirty-fifth Official Year Book issued under the authority of the Commonwealth Government.

The synopsis on pp. viii to xxi immediately following shows the general arrangement of the work. The special index (following the usual general index) provided at the end of the volume, together with certain references given in the various Chapters, will assist in tracing in previous issues matter which, owing to limitations of space, has been omitted or is not printed fully in the present volume.

Economic and financial conditions during recent years have caused a demand for new information, or information expressed in new terms, concerning many matters of finance, trade, prices, production and population, and some progress has been made in the later volumes towards bringing closer to present day requirements the Chapters dealing with these branches of statistics, while a diary of the principal financial and economic events of the years 1939 to 1944 is inserted after the last chapter.

The censorship provisions preclude the publication of certain statistics during the war period. In the present volume Chapters V. "Transport and Communication", XIV. "Trade" and XX. "Mineral Industry" are chiefly affected.

Later information which has been compiled since the various Chapters were sent to press has been incorporated in the Appendix (p. 961).

The material in the Year Book has been carefully checked throughout, but I shall be grateful to those who will be kind enough to point out defects or make suggestions.

My thanks are due to the State Statisticians, who have collected and compiled the data on which the greater part of the information given in the Official Year Book is based. Thanks are also due to the responsible officers of the various Commonwealth and State Departments, and to others, who have kindly, and often at considerable trouble, supplied information; special mention should be made of the services of the Chief Draftsman of the Property and Survey Branch, Department of the Interior, who was responsible for the drawing of the graphs throughout this volume.

An expression of keen appreciation is due in respect of the valuable work performed by Mr. J. P. Dwyer, Editor of the Official Year Book, and of the services rendered by the officers in charge of the various sections of the Commonwealth Bureau of Census and Statistics, upon whom has devolved the duty of revising the Chapters relative to their respective sections.

Publication of the present volume has been delayed through war-time restrictions and preoccupation of a large part of the staff of this Bureau and of the Government Printing Office with urgent war work.

S. R. CARVER,  
Acting Commonwealth Statistician.

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS,  
Canberra, A.C.T., 22nd November, 1944.

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## STATISTICAL SUMMARY.

## STATISTICAL SUMMARY, AUSTRALIA.

Heading.		Year.						
		1891.	1901.	1911.	1921.	1931.	1941.	1943.
Population(a)	Males	1,736,617	2,004,836	2,382,232	2,799,462	3,332,577	3,597,447	3,651,492
	Females	1,504,368	1,820,077	2,191,554	2,711,532	3,220,029	3,539,775	3,614,949
	Persons	3,240,985	3,824,913	4,573,786	5,510,994	6,552,606	7,137,222	7,266,441
Births	No.	110,187	102,945	122,193	136,198	118,509	134,525	149,293
	Rate	34.47	27.16	27.21	24.95	18.16	18.94	20.65
Deaths	No.	47,430	46,330	47,869	54,076	56,560	71,176	74,486
	Rate	14.84	12.22	10.66	9.91	8.67	10.02	10.30
Marriages	No.	23,862	27,753	39,482	46,869	38,882	75,148	67,673
	Rate	7.47	7.32	8.79	8.59	5.96	10.58	9.36
		1891-92.	1901-02.	1911-12.	1921-22.	1931-32.	1941-42.	1942-43.
Agriculture—								
Wheat	Area, acs.	3,334,957	5,115,965	7,427,834	9,719,042	14,741,313	12,003,483	9,280,345
	Yld., bshl.	25,675,265	38,561,619	71,636,347	129,088,806	190,612,188	166,712,865	155,727,983
	Av., "	7.70	7.54	9.64	13.28	12.93	13.89	16.78
Oats	Area, acs.	246,129	461,430	616,794	733,406	1,085,489	1,460,472	1,496,913
	Yld., bshl.	5,726,256	9,780,854	9,501,833	12,147,433	15,194,080	22,302,478	21,531,525
	Av., "	23.27	21.22	15.50	16.56	14.00	15.27	14.38
Barley	Area, acs.	68,068	74,511	116,466	298,910	342,396	784,253	450,615
	Yld., bshl.	1,178,560	1,519,819	2,056,836	6,085,685	6,290,672	18,003,864	8,278,117
	Av., "	17.31	20.40	17.66	20.36	18.37	22.92	18.37
Maize	Area, acs.	284,428	294,849	340,065	305,186	269,448	301,360	284,592
	Yld., bshl.	9,261,922	7,034,786	8,939,855	7,840,438	7,062,383	7,430,174	6,884,953
	Av., "	32.56	23.86	26.29	25.69	26.21	24.67	24.19
Hay	Area, acs.	942,166	1,688,402	2,518,351	2,994,519	2,634,680	2,758,128	2,359,115
	Yld., tons	1,067,255	2,024,608	2,867,973	3,902,189	3,167,459	3,574,888	3,116,053
	Av., "	1.13	1.20	1.14	1.30	1.20	1.30	1.32
Potatoes	Area, acs.	112,884	109,685	130,463	149,144	145,111	99,324	140,209
	Yld., tons	380,477	322,524	301,489	388,091	397,102	332,727	483,561
	Av., "	3.37	2.94	2.31	2.60	2.74	3.35	3.45
Sugar-cane (b)	Area, acs.	45,444	86,050	101,010	128,356	241,576	254,504	240,988
	Yld., tons	737,573	1,367,802	1,682,250	2,436,890	4,213,453	5,153,670	4,691,501
	Av., "	16.23	15.73	16.05	18.99	17.44	20.25	19.47
Vineyards	Area, acs.	48,882	63,677	60,602	92,414	112,961	129,739	130,307
	Wine, gal.	3,437,598	5,262,447	4,975,147	8,542,573	14,190,522	15,856,500	19,793,176
Total gross value all agricultural production		£ 16,988,000	23,835,000	38,774,000	81,890,000	74,489,000	94,451,000	111,230,000
Pastoral, dairying, etc.—								
Live Stock	Sheep No.	106,421,068	72,040,211	96,886,234	86,119,068	110,618,893	125,189,129	124,614,672
	Cattle "	11,112,112	8,491,428	11,828,954	14,441,309	12,260,955	13,560,754	14,005,320
	Horses "	1,584,737	1,620,120	2,278,226	2,438,182	1,775,550	1,611,059	1,517,970
Wool production(c)	Pigs	845,888	931,300	1,110,721	960,385	1,167,845	1,477,303	1,563,000
	'000 lb.	634,046	539,395	798,391	723,059	1,007,456	1,167,159	1,151,167
Butter	lb.	42,311,585	103,717,295	212,073,745	267,071,310	390,654,070	375,194,000	383,571,000
	(d), "	10,130,945	11,815,153	15,886,712	32,653,003	31,422,073	67,520,000	80,930,000
Cheese								
Bacon and ham								
Total gross value of pastoral and dairying production		£ 16,771,886	34,020,629	53,335,092	58,626,469	71,121,740	95,119,000	104,836,000
		39,256,000	36,890,000	72,883,000	119,399,000	103,018,000	184,857,000	204,927,000
		1891.	1901.	1911.	1921.	1931.	1941.	1942.
Mineral production—								
Gold	£	5,281,861	14,017,538	10,551,624	4,018,685	3,563,519	15,990,550	12,060,166
Silver and lead	£	3,736,352	2,218,598	3,022,177	1,530,092	1,143,897	6,253,800	5,623,665
Copper	£	367,373	2,215,431	2,564,278	803,957	567,558	1,505,200	1,665,879
Tin	£	560,502	448,234	1,209,973	418,418	216,205	1,001,179	896,017
Zinc	£	2,979	4,067	1,415,169	283,455	512,795	1,589,913	1,563,017
Coal	£	1,912,353	2,602,733	3,927,360	11,014,831	6,355,246	10,871,870	12,622,786
Total value of all mineral production		£ 12,074,106	21,816,772	23,302,878	20,029,107	13,352,316	41,256,888	38,462,181
Forestry production—								
Quantity of local timber					1921-22.	1931-32.	1941-42.	1942-43.
sawn or hewn—								
'000 sup. ft.		(e)	452,131	604,794	590,495	236,707	913,675	855,728

(a) At 31st December.  
December, except for last three columns, which refer to years ended June.

(b) Area of productive cane.

(c) In terms of greasy.

(d) Years ended

(e) Information not available.



## STATISTICAL SUMMARY AUSTRALIA—continued.

Heading.	Year.						
	1891.	1901.	1911.	1921-22.	1931-32.	1941-42.	1942-43.
<b>Factories—</b>							
No. of factories			14,455	18,023	21,657	26,971	26,414
Hands employed (a) No.			311,710	378,540	336,658	725,342	759,045
Wages paid (b) £			27,528,377	68,050,861	55,931,818	180,052,212	208,866,843
Value of production £			51,259,004	121,674,119	110,981,830	316,439,028	352,002,056
Total value of output £			133,022,090	320,340,765	281,645,785	773,058,971	850,348,656
<b>Shipping—</b>							
Overseas vessels (No. ent. & cleared) tons	3,778	4,028	4,174	3,111	3,057	2,555	(h)
Commerce—							
Imports, overseas £	37,711,000	42,434,000	66,967,488	103,066,436	44,712,868	149,355,797	212,106,701
" per head	11/16/0	11/3/11	14/18/2	18/14/1	6/16/6	20/18/6	29/6/9
Exports overseas £	36,043,000	49,696,000	79,482,258	127,846,535	85,842,887	127,208,381	100,241,464
" per head	11/5/6	13/2/2	17/13/10	23/4/1	13/1/11	17/16/6	13/11/4
Total overseas trade £	73,754,000	92,130,000	146,449,746	230,912,971	130,555,755	276,564,178	312,348,165
" per head £	23/1/6	24/6/1	32/12/0	41/18/5	19/18/5	38/15/0	43/4/1
Customs and Excise duties	£ 7,440,869	£ 8,656,530	£ 13,515,005	£ 27,565,199	£ 28,524,996	£ 56,777,344	£ 64,861,091
" per head £	2/6/7	2/5/8	2/19/2	5/0/1	4/7/1	7/19/1	9/0/2
Principal Oversea Exports (f) £							
Wool	619,260	518,018	720,365	927,834	893,644	937,376	630,077
" cental	19,940,029	15,237,454	26,071,193	47,977,044	32,102,246	58,040,901	44,318,188
Wheat	5,876,875	12,156,035	33,088,704	59,068,334	76,440,603	13,387,573	13,526,462
" cental	1,938,864	2,774,643	9,641,608	28,644,155	19,220,203	4,644,793	4,884,310
Flour	33,363	96,814	175,891	350,721	610,858	413,684	341,719
" lb.	328,423	589,604	1,391,529	5,519,881	3,833,237	4,191,382	3,949,440
Butter	4,239,500	34,007,400	101,722,100	127,347,400	201,639,400	130,347,196	124,320,720
" lb.	206,868	1,451,168	4,637,362	7,968,078	10,250,002	8,124,975	8,085,660
Skins and hides	£ 873,695	£ 1,250,938	£ 3,227,236	£ 3,136,810	£ 2,315,594	£ 5,981,589	£ 3,705,014
Tallow	£ 571,069	£ 677,745	£ 1,935,836	£ 1,441,705	£ 831,415	£ 841,719	£ 186,147
Meats	£ 460,894	£ 2,611,244	£ 4,303,159	£ 5,542,102	£ 6,370,012	£ 14,093,943	£ 10,895,860
Timber (undressed)	£ 38,448	£ 731,301	£ 1,023,960	£ 1,158,166	£ 432,595	£ 320,400	£ 266,746
Gold	£ 5,703,532	£ 14,315,741	£ 12,045,766	£ 3,453,230	£ 11,892,672	£ 9,188,233	(h)
Silver and lead	£ 1,932,278	£ 2,250,253	£ 3,212,584	£ 2,607,130	£ 2,902,056	£ 7,434,017	£ 3,826,166
Copper	£ 417,687	£ 1,619,145	£ 2,345,961	£ 705,358	£ 472,468	£ 7,185,9	£ 9,107
Coal	£ 645,972	£ 986,957	£ 900,622	£ 1,099,899	£ 341,800	£ 259,093	£ 296,533
<b>Govt. Railways—</b>							
Lgh. of line open, mls.	9,541	12,579	16,078	23,502	26,950	27,241	27,223
Capital cost £	99,764,090	123,223,770	152,194,603	244,353,233	321,072,000	322,152,345	324,264,512
Gross revenue £	8,654,085	11,038,468	17,847,837	38,104,630	37,579,965	66,481,738	84,745,989
Working expenses £	5,630,182	7,133,617	10,945,727	29,817,970	28,141,984	51,043,094	64,026,800
Per cent. of working expenses on earnings %	65.06	64.63	61.33	78.07	74.88	76.78	75.55
<b>Postal—</b>							
Letters and postcards dealt with	No. 157,297	220,853	453,063	561,973	(i) 731,135	(i) 921,901	(i) 887,798
" per head	49.07	58.26	100.90	102.01	111.62	129.17	123.32
Newspapers dealt with	No. 85,280	102,727	141,638	140,477	139,502	177,974	163,578
" per head	26.61	27.10	31.54	25.50	21.30	24.94	22.72
<b>Cheque-paying Banks(j)—</b>							
Note circulation £	4,417,260	3,390,462	3,718,458	(k) 213,868	197,121	166,667	(l) 166,550
Coin & bullion held £	16,712,923	19,780,528	33,470,770	21,626,832	2,882,026	4,479,215	(l) 7,837,611
Advances £'000	129,742	86,353	108,579	193,436	(n) 260,018	(n) 323,850	(l)(n) 270,864
Deposits (m) £'000	98,345	91,487	143,447	273,867	(n) 319,241	(n) 482,722	(l)(n) 694,493
<b>Savings Banks (o)—</b>							
Total deposits £	15,536,592	30,882,645	59,393,682	154,396,051	197,966,308	274,274,762	471,530,121
Aver. per head of population	£ 4/18/7	8/3/0	13/8/5	28/0/4	30/1/11	38/4/7	(p) 64/10/8
<b>State Schools—</b>							
Number of Schools	6,231	7,012	8,060	9,445	10,097	9,535	9,075
Teachers	No. 12,504	14,500	16,971	26,120	33,762	32,066	31,684
Enrolment	561,153	638,478	638,850	819,042	936,901	880,655	804,550
Aver. attendance	350,773	450,246	463,799	666,498	817,262	732,116	684,222

(a) Includes working proprietors. (b) Excludes amounts drawn by working proprietors. (c) Owing to variation in classification and lack of information, effective comparison is impossible. (d) Merchandise only. (e) British currency values. The recorded values were—Exports, 1931-32, £A109,034,065; 1941-42, £A159,328,498; and 1942-43, £A125,552,435. (f) Australian produce, except gold, which includes re-exports. (g) In terms of greasy. (h) Not available for publication. (i) Includes packets. (j) Figures for the first three years are averages for the December quarter; the remainder for the June quarter. (k) Decrease due to prohibition of re-issue. (l) Quarter ended June, 1944. (m) Includes Commonwealth Savings Bank deposits in year 1921-22. (n) Government "Set-off" accounts, Interstate (Commonwealth Bank) excluded. (o) First two years at 31st December; remainder 30th June. (p) At 30th June, 1944.

# CHRONOLOGICAL TABLE.

## CHRONOLOGICAL TABLE OF CHIEF EVENTS SINCE THE ESTABLISHMENT OF SETTLEMENT IN AUSTRALIA.

NOTE. The Government was centralized in Sydney, New South Wales, up to 1825, when Tasmania (Van Diemen's Land) was made a separate colony. In the Table, the names now borne by the States serve to indicate the localities.

Year.

- 1788 N.S.W.—Arrival of "First Fleet" at Botany Bay. Land in vicinity being found unsuitable for settlement, the expedition moved to Sydney Cove. Formal proclamation of colony on 7th February. Branch Settlement established at Norfolk Island. French navigator Lapérouse visited Botany Bay. First cultivation of wheat and barley. First grape vines planted.
- 1789 N.S.W.—First wheat harvest at Parramatta, near Sydney. Discovery of Hawkesbury River.
- 1790 N.S.W.—"Second Fleet" reached Port Jackson. Landing of the New South Wales Corps.
- 1791 N.S.W.—Arrival of "Third Fleet." Territorial seal brought by Governor King.
- 1792 N.S.W.—Visit of *Philadelphia*, first foreign trading vessel.
- 1793 N.S.W.—First free immigrants arrived in the *Bellona*. First Australian church opened at Sydney. Tas.—D'Entrecasteaux discovered the Derwent River.
- 1794 N.S.W.—Establishment of settlement at Hawkesbury River.
- 1795 N.S.W.—Erection of the first printing press at Sydney. Descendants of strayed cattle discovered at Cowpastures, Nepean River.
- 1796 N.S.W.—First Australian theatre opened at Sydney. Coal discovered by fishermen at Newcastle.
- 1797 N.S.W.—Introduction of merino sheep from Cape of Good Hope.
- 1798 Tas.—Insularity of Tasmania proved by voyage of Bass and Flinders.
- 1800 N.S.W.—Hunter River coal-mines worked. First Customs House in Australia established at Sydney. Flinders' charts published.
- 1801 N.S.W.—First colonial manufacture of blankets and linen.
- 1802 Vic.—Discovery of Port Phillip by Lieut. Murray. Q'land.—Discovery of Port Curtis and Port Bowen by Flinders. S.A.—Discovery of Spencer's and St. Vincent Gulfs by Flinders.
- 1803 N.S.W.—First Australian wool taken to England by Capt. Macarthur. Issue of "The Sydney Gazette," first Australian newspaper. Vic.—Attempted settlement at Port Phillip by Collins. Discovery of Yarra by Grimes. Tas.—First settlement formed at Risdon by Lieut. Bowen.
- 1804 N.S.W.—Insurrection of convicts at Castle Hill. Vic.—Abandonment of settlement at Port Phillip. Tas.—Foundation of settlement at Hobart by Collins, and at Yorktown by Colonel Paterson.
- 1805 N.S.W.—First extensive sheep farm established at Camden by Capt. Macarthur. Portion of settlers from Norfolk Island transferred to Tasmania.
- 1806 N.S.W.—Shortage of provisions. Tas.—Settlement at Launceston.
- 1807 N.S.W.—Final transfer of convicts from Norfolk Island. First shipment of merchantable wool (245 lb.) to England.
- 1808 N.S.W.—Deposition of Governor Bligh.
- 1809 N.S.W.—Isaac Nichols appointed to supervise delivery of oversea letters.
- 1810 N.S.W.—Post Office officially established at Sydney, Isaac Nichols first post-master. First race meeting in Australia at Hyde Park, Sydney. Tas.—First Tasmanian newspaper printed.
- 1813 N.S.W.—Passage across Blue Mountains discovered by Wentworth, Lawson and Blaxland. Macquarie River discovered by Evans.
- 1814 N.S.W.—Flinders suggested the name "Australia", instead of "New Holland". Creation of Civil Courts.
- 1815 N.S.W.—First steam engine in Australia erected at Sydney. Lachlan River discovered by Evans. Tas.—Arrival of first immigrant ship with free settlers. First export of wheat to Sydney.

## Year.

- 1816 N.S.W.—Botanic Garden formed at Sydney.
- 1817 N.S.W.—Oxley's first exploration inland. Discovery of Lakes George and Bathurst and the Goulburn Plains by Meehan and Hume. First bank in Australia—Bank of New South Wales—opened at Sydney.
- 1818 N.S.W.—Liverpool Plains, and the Peel, Hastings and Manning Rivers discovered by Oxley, and Port Essington by Captain King.
- 1819 N.S.W.—First Savings Bank in Australia opened at Sydney.
- 1820 Tas.—First importation of pure merino sheep.
- 1821 Tas.—Establishment of penal settlement at Macquarie Harbour.
- 1823 N.S.W.—New South Wales Judicature Act passed. Discovery of gold at Fish River by Assistant-Surveyor McBrien. Qld.—Brisbane River discovered by Oxley.
- 1824 N.S.W.—Constituted a Crown Colony. Executive Council formed. Establishment of Supreme Court at Sydney, and introduction of trial by jury. First Australian Enactment (Currency Bill) passed by the Legislative Council. Proclamation of freedom of the press. First manufacture of sugar. Vic.—Hume and Hovell, journeying overland from Sydney, arrived at Corio Bay. Qld.—Penal settlement founded at Moreton Bay (Brisbane). Fort Dundas Settlement formed at Melville Island, N. Terr.
- 1825 N.S.W.—Extension of western boundary to 129th meridian. Tas.—Separation of Van Diemen's Land (Tasmania). Qld.—Major Lockyer explored Brisbane River to its source, and discovered coal.
- 1826 N.S.W.—Settlement in Illawarra District. Vic.—Settlement at Corinella, Western Port, formed by Captain Wright.
- 1827 N.S.W.—Colony became self-supporting. Qld.—Darling Downs and the Condamine River discovered by Allan Cunningham. W.A.—Military Settlement founded at King George's Sound by Major Lockyer. First official claim of British Sovereignty over all Australia.
- 1828 N.S.W.—Second constitution. First Census. Sturt's expedition down Darling River. Gas first used at Sydney. Richmond and Clarence Rivers discovered by Captain Rous. Vic.—Abandonment of settlement at Western Port. Qld.—Cunningham discovered a route from Brisbane to the Darling Downs, and explored Brisbane River.
- 1829 N.S.W.—Sturt's expedition down Murrumbidgee River. W.A.—Foundation of settlement at Swan River. Foundation of Perth.
- 1830 N.S.W.—Insurrection of convicts at Bathurst. Sturt, voyaging down Murrumbidgee and Murray Rivers, arrived at Lake Alexandrina. Tas.—Trouble with natives. Black line organized to force aborigines into Tasman's Peninsula, but failed. Between 1830 and 1835, however, George Robinson, by friendly suasion, succeeded in gathering the small remnant of aborigines (203) into settlement on Flinders Island.
- 1831 N.S.W.—Crown lands first disposed of by public competition. Mitchell's explorations north of Liverpool Plains. Arrival at Sydney of first steamer, *Sophia Jane*, from England. SS. *Surprise*, first steamship built in Australia, launched at Sydney. First coal shipped from Australian Agricultural Company's workings at Newcastle, N.S.W. First assisted immigration to N.S.W. S.A.—Wakefield's first colonization committee. W.A.—Appointment of Executive and Legislative Councils.
- 1832 N.S.W.—State Savings Bank established.
- 1833 N.S.W.—First School of Arts established at Sydney.
- 1834 N.S.W.—First settlement at Twofold Bay. Vic.—Settlement formed at Portland Bay by Henty Bros. S.A.—Formation of the South Australian Association. W.A.—Severe reprisals against natives at Pinjarrah.
- 1835 Vic.—John Batman arrived at Port Phillip; made treaty with the natives for 600,000 acres of land; claim afterwards disallowed by Imperial Government. Foundation of Melbourne.



- Year.
- 1836 N.S.W.—Mitchell's overland journey from Sydney to Cape Northumberland. Vic.—Proclamation of Port Phillip district as open for settlement. S.A.—Settlement founded at Adelaide under Governor Hindmarsh.
- 1837 N.S.W.—Appointment in London of Select Committee on Transportation. Vic.—Melbourne named by Governor Bourke. First overlanders from Sydney arrived at Port Phillip.
- 1838 N.S.W.—Discontinuance of assignment of convicts. Qld.—Settlement of German missionaries at Brisbane. S.A.—“Overlanding” of cattle from Sydney to Adelaide along the Murray route by Hawden and Bonney. Settlement at Port Essington, Northern Territory, formed by Captain Bremer.
- 1839 N.S.W.—Gold found at Vale of Clwydd by Count Strzelecki. S.A.—Lake Torrens discovered by Eyre. Port Darwin discovered by Captain Stokes. W.A.—Murchison River discovered by Captain Grey.
- 1840 N.S.W.—Abolition of transportation to New South Wales. Land regulations—proceeds of sales to be applied to payments for public works and expenditure on immigration. Vic.—Determination of northern boundary. Qld.—Penal settlement broken up and Moreton Bay district thrown open. S.A.—Eyre began his overland journey from Adelaide to King George's Sound.
- 1841 N.S.W.—Gold found near Hartley by Rev. W. B. Clarke. W.A.—Completion of Eyre's overland journey from Adelaide to King George's Sound. Tas.—Renewal of Transportation. New Zealand proclaimed a separate colony.
- 1842 N.S.W.—Incorporation of Sydney. Vic.—Incorporation of Melbourne. S.A.—Discovery of copper at Kapunda.
- 1843 N.S.W.—First Representative Constitution (under Act of 1842). First manufacture of tweed. Qld.—Moreton Bay granted legislative representation.
- 1844 Qld.—Leichhardt's expedition to Port Essington. S.A.—Sturt's last expedition inland.
- 1845 N.S.W.—Mitchell's explorations on the Barcoo. Qld.—Explorations by Mitchell and Kennedy. S.A.—Discovery of the Burra copper deposits. Sturt discovered Cooper's Creek.
- 1846 N.S.W.—Initiation of meat-preserving. Qld.—Foundation of settlement at Port Curtis. S.A.—Proclamation of North Australia. W.A.—Foundation of New Norcia (Benedictine) Mission.
- 1847 N.S.W.—Iron-smelting commenced near Berrima. Overland mail established between Sydney and Adelaide. Vic.—Melbourne created a City. Qld.—Explorations by Leichhardt, Burnett and Kennedy.
- 1848 Qld.—Leichhardt's last journey. Kennedy speared by the blacks at York Peninsula. Chinese brought in as shepherds.
- 1849 N.S.W.—Indignation of colonists at arrival of convict ship *Hashemy*. Exodus of population to gold-fields of California. Vic.—Randolph prevented from landing convicts. Qld.—Assignment of convicts per *Hashemy* to squatters on Darling Downs. W.A.—Commencement of transportation to Western Australia.
- 1850 N.S.W.—Final abolition of transportation. First sod of first Australian railway turned at Sydney. Sydney University founded. Vic.—Gold discovered at Clunes by Hon. W. Campbell. Representative government granted. S.A.—Representative government granted. W.A.—Pearl oysters found by Lieut. Helpman at Saturday Island Shoal. Tas.—Representative government granted.
- 1851 N.S.W.—Payable gold discovered by Hargraves at Lewis Ponds and Summerhill Creek. Vic.—Separation of Port Phillip—created an independent colony under the name of Victoria. Discovery of gold in various localities. “Black Thursday,” 6th Feb., a day of intense heat. W.A.—Proclamation of Legislative Council Act.
- 1852 N.S.W.—Arrival of the *Chusan*, first P. and O. mail steamer from England. S.A.—First steamer ascended the Murray River to the junction with the Darling. Tas.—Meeting of first elective Council protests against transportation. Payable gold discovered at The Nook, near Fingal, and at Nine Mile Springs.

## Year.

- 1853 Tas.—Abolition of transportation. Vic.—Melbourne University founded.
- 1854 Vic.—Opening of first Victorian railway—Flinders-street to Port Melbourne. Riots on Ballarat gold-fields. Storming of the Eureka Stockade, 3rd Dec. Telegraph first used.
- 1855 N.S.W.—Opening of railway—Sydney to Parramatta. Mint opened.
- 1856 N.S.W.—Pitcairn Islanders placed on Norfolk Island. W.A.—A. C. Gregory's expedition in search of Leichhardt. Responsible Government in N.S.W., Vic., S.A. and Tas. (Act of 1855).
- 1857 N.S.W.—Wreck of the *Dunbar* (119 lives lost), and *Catherine Adamson* (21 lives lost), at Sydney Heads. Select Committee on Federation. Vic.—Manhood suffrage and vote by ballot. S.A.—Passage of Torrens' Real Property Act.
- 1858 N.S.W.—Establishment of manhood suffrage and vote by ballot. Telegraphic communication between Sydney, Melbourne and Adelaide. Qld.—Canoona gold rush.
- 1859 Qld.—Proclamation of Queensland as separate colony. Tas.—First submarine cable, via Circular Head and King Island to Cape Otway.
- 1860 Vic.—Burke and Wills left Melbourne and crossed to Gulf of Carpentaria. S.A.—Copper discoveries at Wallaroo and Moonta. McDouall Stuart reached centre of continent and named "Central Mount Stuart".
- 1861 N.S.W.—Anti-Chinese riots at Lambing Flat and Burrangong gold-fields. Opening of first tramway in Sydney. Regulation of Chinese immigration. Vic.—Burke and Wills perished at Cooper's Creek, near Innamincka, S.A.
- 1862 N.S.W.—Abolition of State aid to religion. Real Property Act. S.A.—Stuart crossed the Continent from south to north. W.A.—First export of pearl-shell.
- 1863 Vic.—Intercolonial Conference at Melbourne. S.A.—Northern Territory taken over. W.A.—Initiation of settlement in the North-west district. Henry Maxwell Lefroy discovered and traversed area now comprised in the Coolgardie-Kalgoorlie gold-field.
- 1864 Qld.—First railway begun and opened. First sugar made from Queensland cane. Tas.—First successful shipment of English salmon ova.
- 1865 N.S.W.—Destruction by fire of St. Mary's Cathedral, Sydney.
- 1866 N.S.W.—Passage of Public Schools Act of (Sir) Henry Parkes. S.A.—Introduction of camels for exploration, etc.
- 1867 Vic.—Imposition of protective tariff. Qld.—Discovery of gold at Gympie.
- 1868 N.S.W.—Attempted assassination of the Duke of Edinburgh at Clontarf, near Sydney. W.A.—Arrival of the *Hougomont*, last convict ship. Tas.—First sod of first railway (Launceston and Western) turned by Duke of Edinburgh.
- 1869 Vic.—Record gold nugget "Welcome Stranger" 2,284 oz. found near Dunolly. W.A.—First telegraph line opened from Perth to Fremantle.
- 1870 N.S.W.—Intercolonial Exhibition opened at Sydney. Imperial troops withdrawn. Vic.—Intercolonial Congress at Melbourne. S.A.—Commencement of trans-continental telegraph.
- 1871 N.S.W.—Permanent military force raised. W.A.—Passage of Elementary Education Act. Forrest's explorations. Tas.—Discovery of tin at Mount Bischoff. Launceston-Western railway opened for traffic.
- 1872 N.S.W.—International Exhibition at Sydney. Vic.—Mint opened. S.A.—Cable from Java to Port Darwin. Completion of transcontinental telegraph line.
- 1873 N.S.W.—Intercolonial Conference at Sydney. First volunteer encampment. Inauguration of mail service with San Francisco.
- 1874 N.S.W.—Triennial Parliaments Act passed. Intercolonial Conference. W.A.—John and Alexander Forrest arrived at Overland Telegraph from Murchison. S.A.—University of Adelaide founded.
- 1875 Qld.—Transfer of Port Albany Settlement to Thursday Island.
- 1876 N.S.W.—Completion of cable—Sydney (La Perouse) to Wellington (Wakapuaka). W.A.—Giles crossed colony from east to west. Tas.—Death of Truganini, last representative of Tasmanian aborigines.

## Year.

- 1877 W.A.—Opening of telegraphic communication with South Australia.
- 1878 Qld.—Restriction of Chinese immigration.  
Introduction of telephone into Australia.
- 1879 N.S.W.—First artesian bore at Killara. International Exhibition at Garden Palace, Sydney. First steam tramway. W.A.—A. Forrest's explorations in the Kimberley district, and discovery of the Fitzroy pastoral country.
- 1880 N.S.W.—Public Instruction Act passed. Vic.—Opening of first Victorian International Exhibition at Melbourne. First Australian Telephone Exchange opened in Melbourne.  
Federal Conference at Melbourne and Sydney.
- 1881 N.S.W.—Further restrictions on Chinese immigration.  
Visit to Australia of T.R.H. Prince Albert Victor and Prince George.
- 1882 N.S.W.—Garden Palace destroyed by fire. W.A.—Nugget of gold found between Roebourne and Cossack.
- 1883 N.S.W.—Discovery of silver at Broken Hill. Completion of railway between New South Wales and Victoria. Qld.—Annexation of New Guinea—repudiated by Imperial authorities.  
Federal Conference held at Sydney. Federal Council created.
- 1884 Federation Bill passed in Victoria and rejected in New South Wales. British protectorate declared over New Guinea.
- 1885 N.S.W.—Military contingent sent to the Sudan. Opening of the Broken Hill Proprietary Silver Mines. W.A.—Gold found by prospectors on the Margaret and Ord Rivers in the Kimberley district. Tas.—Silver-lead discovered at Mount Zeehan.
- 1886 Tas.—Discovery of gold and copper at Mount Lyell.  
First session of Federal Council met at Hobart on 26th January.
- 1887 N.S.W.—Disaster at Bulli coal-mine (81 lives lost). S.A.—International Exhibition at Adelaide. W.A.—Cyclone destroyed nearly the whole pearling fleet off the Ninety-Mile Beach—200 lives lost. Gold discovered at Southern Cross.  
First "Colonial" Conference in London. Australasian Naval Defence Force Act passed.
- 1888 N.S.W.—Centennial celebrations. Restrictive legislation against Chinese, imposing poll-tax of £100. Vic.—Second Victorian International Exhibition held at Melbourne. Qld.—Railway communication opened between Sydney and Brisbane.  
Conference of Australian Ministers at Sydney to consider question of Chinese immigration. First meeting of the Australasian Association for the Advancement of Science held in Sydney.
- 1889 Qld.—Direct railway communication established between Brisbane and Adelaide. W.A.—Framing of new Constitution. Tas.—University of Tasmania founded.
- 1890 W.A.—Responsible Government granted.  
Meeting at Melbourne of Australasian Federation Conference.
- 1891 N.S.W.—Election to Legislative Assembly of 35 Labour members. Arrival of Australian Auxiliary Squadron. Cessation of assisted immigration. W.A.—Discovery of gold on the Murchison.  
First Federal Convention in Sydney; draft bill framed and adopted.
- 1892 W.A.—Discovery of gold by Messrs. Bayley and Ford at Coolgardie.
- 1893 N.S.W.—Departure by the *Royal Tar* of colonists for "New Australia".  
Financial crisis, chiefly affecting the eastern States.
- 1895 N.S.W.—Free-trade tariff. Land and income taxes introduced.  
Conference of Premiers on Federation at Hobart.
- 1896 N.S.W.—People's Federal Convention at Bathurst.
- 1897-8 Sessions of Federal Convention at Adelaide, Sydney and Melbourne.
- 1898 N.S.W.—First surplus of wheat for export.  
Draft Federal Constitution Bill submitted to electors in Victoria, New South Wales, South Australia and Tasmania. Requisite statutory number of votes not obtained in New South Wales.



Year.

- 1899 First contingent of Australian troops sent to South Africa. Conference of Premiers in Melbourne to consider amendments to Federal Constitution Bill. Referendum—Bill accepted by New South Wales, Victoria, Queensland, South Australia and Tasmania. First Labour Government (Queensland).
- 1900 N.S.W.—Old-age pensions instituted.  
Contingents of naval troops sent to China. Commonwealth Constitution Act received Royal Assent, 9th July. Proclamation of Commonwealth signed, 17th September. Mr. (afterwards Sir) Edmund Barton formed first Federal Ministry.
- 1901 Vic.—Old-age pensions instituted.  
Proclamation of the Commonwealth at Sydney. First Federal Parliament opened at Melbourne by the Duke of Cornwall and York. Interstate free-trade established.
- 1902 N.S.W.—Disastrous explosion at Mount Kembla Colliery—95 lives lost. W.A.—Opening of pumping station at Northam in connexion with Gold-fields water supply. Completion of Pacific Cable (all-British). First Federal Tariff.
- 1903 W.A.—Coolgardie and Kalgoorlie Water Supply Scheme completed.  
Inauguration of the Federal High Court.
- 1905 N.S.W.—Re-introduction of assisted immigration.
- 1906 Wireless telegraphy installed between Queenscliff, Vic., and Devonport, Tas. Papua taken over by Commonwealth.
- 1907 N.S.W.—Telephone, Sydney to Melbourne, opened. First telephone trunk line service between Capital Cities, i.e., Sydney and Melbourne.  
Imperial Conference in London.
- 1908 Canberra chosen as site of Australian Capital. Visit of U.S.A. fleet to Australia.
- 1909 Imperial Defence Conference in London—Commonwealth ordered two destroyers and one first-class cruiser for fleet unit. Visit of Lord Kitchener to report and advise on Australian military defence. Queensland University founded.
- 1910 Referendum on financial relations between the Commonwealth and the States. Penny Postage. Arrival of the *Yarra* and *Paramatta*, first vessels built for the Royal Australian Navy. Australian Notes Act passed and first Commonwealth notes issued. Admiral Sir R. Henderson visited Australia to advise on naval defence.
- 1911 First Federal Census. Transfer of Australian Capital Territory and Northern Territory to Commonwealth. Introduction of compulsory military training. Establishment of penny postage to all parts of British Empire. University of Western Australia founded.
- 1912 Opening of Commonwealth Bank. First payments of Maternity Bonus. First sod turned at Port Augusta of Trans-Australian Railway (Port Augusta to Kalgoorlie).
- 1913 Australian Capital named Canberra and foundation stone laid. Appointment of Interstate Commission.
- 1914 Visit of General Sir Ian Hamilton to report on military defence scheme. Double dissolution of Federal Parliament. Visit of British Association for the Advancement of Science. Transfer of Norfolk Island to Commonwealth.  
European War declared 4th August. Australian Navy transferred to British Navy. Australian offer to equip and furnish 20,000 troops accepted. German possessions in South-West Pacific seized by Australian Naval and Military Expeditionary Force. German cruiser *Emden* destroyed by H.M.A.S. *Sydney* at Cocos Islands, 9th November. First contingent landed in Egypt. Australian and New Zealand Army Corps (A.N.Z.A.C.) formed under Sir William Birdwood.
- 1915 Opening of Broken Hill Proprietary's Ironworks at Newcastle, N.S.W. Navy Department created. Defeat of Third Fisher Government. Hughes Ministry formed.  
Australian and New Zealand troops landed at Gallipoli, 25th April. Battle of Sari Bair (Lone Pine), 6th–10th August. Evacuation, 18th–20th December. Australian warships with Grand Fleet, in Atlantic, Malaysia, and elsewhere overseas during remainder of war.

Year.

1916 Purchase of steamships by the Commonwealth.

Australian and New Zealand mounted troops organized in mounted divisions and camel corps, operating thereafter in Egypt, Palestine and Syria. Battle of Romani, 4th August. Other troops with reinforcements organized as four infantry divisions (1st, 2nd, 4th and 5th) with some other units, and transferred to France. Fromelles, 19th July; the Somme, 1st July-18th November (Pozières, Moquet Farm, Flers). 3rd Division, formed in Australia, landed in France. First proposal for compulsory military service defeated by referendum.

1917 National Ministry formed under Rt. Hon. W. M. Hughes. Kalgoorlie-Port Augusta railway completed.

German withdrawal from Somme; Arras offensive (Bullecourt, 11th April and 3rd May); Messines, 7th June; Third Battle of Ypres, 1st July-10th November (Menin Road, Polygon Wood, Broodseinde, Passchendaele). Palestine—Gaza, 26th March, 19th April, 31st October (Beersheba). Australian Flying Corps operating with R.F.C. in Palestine and France. Second proposal for compulsory military service defeated by referendum.

1918 Population of Australia reached 5,000,000. Australia House (Strand, London) opened by the King.

Five Australian divisions in France formed into army corps, 1st January. Sir William Birdwood succeeded by Sir John Monash, 30th May. Defensive campaign on Somme, 21st March-25th April (Dernancourt, Villers-Bretonneux); Battles of the Lys, 9th-29th April (Hazebrouck); Hamel, 4th July; Battle of Amiens, 8th August; Mont St. Quentin, 31st August; Hindenburg Line, 18th September-5th October. Palestine—Megiddo, 19th September; Damascus, 1st October. Armistice with Germany, 11th November. Repatriation Commission created.

1919 Messrs. Hughes and Cook represented Australia at Peace Conference. Return of Australian troops. Aerial flight England to Australia by Capt. Sir Ross Smith and Lieut. Sir Keith Smith. Peace Treaty signed at Versailles, 28th June.

1920 Visit to Australia of H.R.H. the Prince of Wales. Wholesale prices reached a point more than double the 1914 level.

1921 Second Commonwealth Census. Germany's indemnity fixed (Australia's share approximately £63,000,000). Mandate given to Australia over Territory of New Guinea. First direct wireless press message, England to Australia.

1922 First lock on River Murray opened at Blanchetown, South Australia. Queensland Legislative Council abolished.

1923 First sod turned on the site of Federal Parliament House at Canberra.

1924 Visit of British cruiser squadron. Directorate of Commonwealth Bank appointed. Australian Loan Council formed.

1925 Visit of American fleet. Solar Observatory established at Canberra. Brisbane-Grafton railway joining Sydney and Brisbane by uniform gauge was commenced. Sydney Harbour Bridge commenced.

1926 Population of Australia reached 6,000,000. Council for Scientific and Industrial Research established. Imperial Conference. Dominion Status defined.

1927 Transfer of Seat of Commonwealth Government from Melbourne to Canberra. New Parliament House opened by H.R.H. the Duke of York. Beam Wireless established.

1928 Visit of British Economic Mission to report on the development of Australian resources. Financial agreement of Commonwealth and States; Loan Council reconstituted; State debts to be taken over; Referendum carried.

1929 Beginning of fall in export prices. Commonwealth Bank empowered to mobilize gold reserve. Substantial export of gold reserves towards end of year. Bruce-Page Government defeated. Labour Ministry formed by Hon. J. H. Scullin.

## Year.

- 1930 Wireless phone service with other countries inaugurated. Export prices fell to half 1928 level. Cessation of oversea loans. Tariff embargoes and rationing of imports. Visit of Sir Otto Niemeyer, of Bank of England, to discuss financial questions. Heavy export of gold reserves. Exchange Pool formed. £28,000,000 Conversion Loan fully subscribed. Gold bonus granted. Government deficits total nearly £11,000,000. First Australian—Right Hon. Sir Isaac Alfred Isaacs, G.C.M.G., Chief Justice of the High Court—appointed Governor-General of Australia. Telephone trunk line service established between Adelaide and Perth linking up the whole of the mainland States by telephone.
- 1931 Depression continues; Australia substantially off gold standard with exchange rate at 130 in January; 10 per cent. cut in Federal basic wage. First experimental air mail England to Australia and return. New South Wales Savings Bank suspension and subsequent absorption by Commonwealth Bank. Postponement of sinking fund payments on war debt to British Government for two years. Initiation of Premiers' Conference plan to meet the financial situation. Commonwealth Bank Act amended to provide for temporary lower reserve against notes; substantial export of gold reserves. Hoover Moratorium on War Debts. England departs from gold standard in September; depreciation of Australian £1 on Sterling continued. Wheat bounty granted. Commonwealth Bank assumed control of exchange rate and lowered it to 125. Government deficits total £25,370,000, 1930-31.
- 1932 Sydney Harbour Bridge opened. Australian Broadcasting Commission established. New South Wales Government default in interest payments made good by Commonwealth Government; conflict of Commonwealth and New South Wales governments. Lang Ministry dismissed in New South Wales. Emergency restrictions on imports relaxed. Legislation passed enabling note reserve to be held in sterling securities, subsequently gold was shipped to the United Kingdom. Imperial Economic Conference at Ottawa, with consequential tariff agreements. Scullin Government defeated. Lyons Ministry formed. Sugar Agreement modified. Taxation reductions and assistance to wheat-growers. Government deficits reduced to £19,500,000 for 1931-32.
- 1933 Third Commonwealth Census. Imperial Air-mail "Astraea" arrived. World Economic Conference in London. Australia elected as Member of League of Nations. Secession Referendum (Western Australia). Referendum for reduction and limitation of number of members of Legislative Council (New South Wales). Disarmament Conference in London. Record wheat harvest (213,927,000 bushels). Antarctica and Ashmore and Cartier Islands taken over by the Commonwealth. Government deficits reduced to £4,500,000 for 1932-33.
- 1934 Visit of H.R.H. the Duke of Gloucester to open Victorian Centenary Celebrations, Goodwill Mission to the East—Leader Rt. Hon. J. G. Latham. Record flight from England to Australia by Messrs. Scott and Black (Centenary Air Race) in 71 hours. Inauguration of England-Australia Air Mail Service.
- 1935 Silver Jubilee of H.M. King George V. Visit to London for Jubilee Celebrations of the Rt. Hon. J. A. Lyons, Prime Minister. Empire Statistical Conference at Ottawa. Japanese Goodwill Mission to Australia. Meeting of the British Medical Association for the first time in Australia.
- 1936 Death of H.M. King George V. South Australian Centenary. Trade dispute with Japan. Rise in wheat prices. Joint Commonwealth and State Marketing Schemes invalidated by decision of the Privy Council in the James case. Abdication of H.M. King Edward VIII. Tasmania linked with mainland by submarine telephone cable.



## Year.

- 1937 Referendum on Commonwealth control of aviation and marketing defeated on both issues. Coronation of H.M. King George VI. Imperial conference in London. New Education Fellowship Conference held in all States. Commonwealth basic wage increased by 5s. per week. Report of the Royal Commission on Monetary and Banking Systems in Australia. Epidemic of Infantile Paralysis mainly in Victoria and Tasmania.
- 1938 New South Wales Sesqui-Centenary Celebrations. Australian Trade Delegation to review Ottawa Agreement. New Lyons Ministry. New Defence Programme involving expenditure of £63,000,000 over three years; militia forces to be raised to 70,000. New Trade Treaty with Japan. British Empire Games in Sydney.
- 1939 Death of the Rt. Hon. J. A. Lyons, Prime Minister. Page Ministry 7th to 26th April. Menzies Ministry formed. National Register and Wealth Census. European war. Australia participates in vast Empire Air Training Scheme. Compulsory military training re-introduced for home defence. Special volunteer force of 20,000 men enlisted and trained for service overseas. Purchase by the British Government of the Australian wool clip and the export surplus of butter, cheese, eggs, meat, sugar, wheat, flour, lead, and zinc.
- 1940 Exchange of Ministers between Australia and United States of America. Appointment of Australian Minister to Japan. Exchange of High Commissioners between Australia and Canada. Population of Australia reached 7,000,000. Australian Forces embark for overseas service. Naval Dock commenced at Sydney. New Menzies Ministry formed. Air crash at Canberra, resulting in death of three Cabinet Ministers—the Hon. G. A. Street, the Hon. J. V. Fairbairn, and the Hon. Sir Henry Gullett. Petrol rationing introduced. Commonwealth elections held.
- 1941 Appointment of Japanese Minister to Australia. Prime Minister's visit to London. Appointment of Sir Thomas Blamey as Deputy Commander-in-Chief of British Forces in the Middle East. Establishment of Commonwealth Child Endowment Scheme. Cessation of commercial relations between Australia and Japan. Exchange of Ministers between Australia and China. United States Congress passed Lend-Lease Bill. Atlantic Charter signed by Mr. Roosevelt and Mr. Churchill. Hon. A. Fadden succeeded Rt. Hon. R. G. Menzies as Prime Minister. Fadden Government defeated on Budget. Hon. J. Curtin formed Labour Ministry. Japanese attack on Pearl Harbour. Outbreak of war with Japan. War-time control of trading banks.
- 1942 Daylight saving introduced. Darwin bombed. Allied Supply Council formed. United States armed forces land in Australia. General Douglas MacArthur Supreme Commander of Allied Forces in South-west Pacific. Regulation of Prices, April, 1942. Federal uniform taxation adopted. Commonwealth Widows' pensions introduced. Japanese submarines sunk in Sydney Harbour. Rationing of commodities. Labour Corps formed for Allied Works. Contract price of wool increased. Gold-mining curtailed. H.M.A.S. *Canberra* sunk by enemy action. Exchange of Ministers between Netherlands, Soviet Union of Russia and Australia. Constitutional Convention held in Canberra—Bill approved for reference to Commonwealth by States of powers to make laws in relation to post-war reconstruction. Department of Post-war Reconstruction formed. Commonwealth Child Endowment cost £11,303,000 in 1941-42. £100,000,000 Austerity Loan over-subscribed.
- 1943 Ceiling prices fixed, 12th April. Commonwealth elections held—return of Curtin Government. National Register of Civilians. High Commissioners appointed to India and New Zealand. Price Stabilization Scheme. Fourth Liberty Loan £125,000,000 over-subscribed. Mortgage Bank Department of Commonwealth Bank opened. National Works Council formed. Militia used in South-west Pacific area. Announced that H.R.H. the Duke of Gloucester would become Governor-General of Australia. Assistance given to University students in certain faculties.

# OFFICIAL YEAR BOOK

OF THE

## COMMONWEALTH OF AUSTRALIA, 1942 AND 1943.

### CHAPTER I.

#### DISCOVERY, COLONIZATION AND FEDERATION OF AUSTRALIA.

##### § 1. Early Knowledge and Discovery of Australia.

1. Introduction.—It is proposed to give here only a brief summary of the more important facts relating to the early history of Australian discovery. A more complete account of this subject, together with bibliographical references thereto, may be found in Official Year Book No. 1 (pp. 45-51), although this account must be modified somewhat in view of later investigations.

2. Early Tradition.—It would appear that there was an early Chaldean tradition as to the existence of an Austral land to the south of India. Rumours to that effect in the course of time found their way to Europe, and were probably spread by travellers from Indian seas, more especially by the Greek soldiers who accompanied Alexander the Great [356-234 B.C.] to India. References to this *Terra Australis* are found in the works of Ælianus [A.D. 205-234], Manilius [probably a contemporary of Augustus or Tiberius Cæsar], and Ptolemy [A.D. 107-161]. In some of the maps of the first period of the Middle Ages there is evidence which might warrant the supposition of the knowledge of the existence of a *Terra Australis*, while some idea of the Austral land appears in the maps and manuscripts of the fourteenth and fifteenth centuries. But much of the map-drawing in these early days was more or less fanciful, and there is no evidence definitely connecting this so-called *Terra Australis* with Australia.

3. Discovery of Australia.—(i) *General*. The Venetian traveller Marco Polo [1254-1324] refers to a land called Locac, which through a misunderstanding of his meaning was long thought to be Australia. But Marco Polo knew nothing of any land to the south of Java, and in any case the description given of the so-called Locac could not possibly be applied to Australia, as the writer speaks of elephants, etc. On a Mappamundi in the British Museum, of not later date than 1489, there is a coast-line which has been considered to represent the west coast of Australia. Investigation by Wood and others proves this claim to be merely fanciful. Martin Behaim's globe, the oldest known globe extant, constructed in 1492, also shows what purports to be a part of Australia's coast line, and a globe discovered in Paris bears an inscription to the effect that the *Terra Australis* was discovered in 1499. These also have other countries located in impossible positions. The term *Terra Australis* was, however, also applied to the region now known as Tierra del Fuego, hence little weight can be attached to this reference.

In the Dauphin map [about 1530-1536] Java la Grande has been supposed by some to represent Australia, but an inspection of the unreal animals and other figures thereon lends no weight to the idea. As a matter of fact much of this map drawing was simply an attempt to support the old notion that the land surface of the southern hemisphere must balance that of the northern.

(ii) *Arab Expeditions*. It has been stated that the Arabs had come to Australia long before the Portuguese, the Spaniards or the Dutch, but there is no evidence to support the statement.

(iii) *Spanish and Portuguese Expeditions.* The last decade of the fifteenth century and the commencement of the sixteenth saw numerous expeditions equipped in the ports of Spain and Portugal for the purpose of exploiting the new world. The Portuguese rounded the Cape of Good Hope in 1487 and eleven years later pushed eastward to India. The Spaniards, relying on the scientific conclusion that the world was spherical, attempted to get to the East by deliberately starting out west, Magalhaens by so doing reaching the Philippine Islands in 1521.

In 1606 Quiros, on reaching the island that has retained the name of *Espiritu Santo* (the largest island of the New Hebrides group), thought that he had discovered the great land of the south, and therefore named the group *La Australia del Espiritu Santo*. After leaving the New Hebrides, Quiros sailed eastward, but Torres, his second-in-command, took a westerly course and passed through the strait that now bears his name. In all probability he sighted the Australian Continent, but no mention is made of this fact in his records. This voyage marks the close of Spanish activity in the work of discovery in the South Seas.

(iv) *Discoveries by the Dutch.* With the decline of Portuguese and Spanish naval supremacy came the opportunity of the Dutch for discovery. Cornelius Wytiliet's map, of which there was an English edition, published in Louvain in 1597, indicates roughly the eastern and western coasts of Australia, as well as the Gulf of Carpentaria. The following noteworthy passage occurs in Wytiliet's *Descriptionis Ptolemæicæ Augmentum*: "The *Australis Terra* is the most southern of all lands. It is separated from New Guinea by a narrow strait. Its shores are hitherto but little known, since after one voyage and another, that route has been deserted and seldom is the country visited, unless when sailors are driven there by storms. The *Australis Terra* begins at one or two degrees from the equator, and is maintained by some to be so great in extent that, if it were known and explored, it would be reckoned as a fifth part of the world." According to Wood the above passage has its origin in the voyages through the straits of Magellan and the discovery of Tierra del Fuego rather than that of Australia.

The Dutch discovered Australia when the Dutch East India Company sent the *Duyfhuysen* to Australia to explore the islands of New Guinea. During March, 1606, the *Duyfhuysen* coasted along the southern shores of New Guinea, and followed the west coast of New Guinea as far as Cape Keer-Weer (Turn Again). Dirk Hartogs (on the name in the Amsterdam Museum recording his voyage the name is written Dirk Hartog, in the *Deelicht* in 1696, sailed along a considerable part of the west coast of the continent. It may be mentioned that the route was not definitely selected, but that the vessel for shortly went farther west than the usual course from the Cape to Java.

In 1615 the *Zeeuwolf* found land in latitude 26° 15' south, and in the following year Frederick Houtman discovered the rest of the west coast, now known as *Houtman's Abrolhos*.

Four years later the Dutch vessel *Loewen* rounded the Cape, which now bears that name, at the north-west of the continent, and in 1618 the Dutch vessels *Pera* and *Arnhem* discovered Australia south of the peninsula on the western side of the Gulf of Carpentaria, which was again the complaint to Peter Carpentier, Governor of the Dutch East India Company.

In 1627, Francis Thijez, Commander of the *Gulde Zeeperd*, with Pieter Nuyts, of the *Fort de Heeren* of Seventeen, on board, coasted along a portion of the shore of the Great Australian Bight. In 1628, De Witt, Commander of the *Vianen*, discovered land on the north-west, namely, in about latitude 21° S. The *Batavia*, commanded by Francis Pelsart, was wrecked on the western coast of Australia in 1629. Pelsart was the first to carry to Europe an authentic account of the west coast of Australia, which, however, he described in the most unfavourable terms. The yachts *Amsterdam* and *Wesel*, under Gerrit Pool, visited the Gulf of Carpentaria in 1636.

Andreasen Tasman, in command of two vessels, the *Heemskerck* and *Zeehuven*, set out from Batavia in 1642 to ascertain the extent of the great southern continent. He named Van Diemen's Land, imagining it to be part of Australia proper, and sailing north-westerly discovered New Zealand and returned to Batavia. In his second voyage in 1644, Tasman visited the northern coast of Australia, sailing round the Gulf of Carpentaria and along the north-west coast as far down as the tropic of Capricorn.



William de Vlamingh landed at the mouth of the Swan River at the end of 1696 and an exploring squadron under Martin Van Delft explored and named part of the north-west coast in 1703, but the period of Dutch discoveries may be said to have ended with Tasman's second voyage, and, with the decline of her maritime power, the Dutch interest in Australian discovery disappeared.

4. Discoveries by the English. — In the meantime the English had made their first appearance on the Australian coast in 1688, when the north-westerly shores were visited by William Dampier, as supercargo of the *Cygnet*, a trading vessel whose crew had turned buccaneers. In describing the country, Dampier stated that he was certain that it joined neither Asia, Africa nor America. In 1699 he again visited Australia, in command of H.M.S. *Roebuck*, and on his return to England published an account in which a description is given of trees, flowers, birds and reptiles observed, and of encounters with natives.

It was a question at the end of the seventeenth century whether Tasmania and New Zealand were parts of Australia, or whether they were separated from it, but themselves formed part of a great Antarctic Continent. Lieutenant James Cook's first voyage, though primarily undertaken for the purpose of observing the transit of Venus from Otaheite, had also for its objective to ascertain whether the unexplored part of the southern hemisphere was only an immense mass of water or contained another continent. In command of H.M.S. *Endeavour*, a barque of 370 tons burthen, carrying about 80 persons, and accompanied by Sir Joseph Banks, Dr. Solander the naturalist, Green the astronomer, draughtsmen and servants, Cook, after observing the transit of Venus at Otaheite, turned towards New Zealand, sighting that land on 7th October, 1769, in the neighbourhood of Poverty Bay. Circumnavigating the North and South Islands, he proved that New Zealand was connected neither with the supposed Antarctic Continent nor with Australia, and took formal possession thereof in the name of the British Crown. On 20th April, 1770, at 6 a.m., Cook sighted the Australian mainland at a place he called Point Hicks, naming it after his first-lieutenant, who first saw it. Coasting northwards, Botany Bay was discovered on 26th April, 1770. The *Endeavour* dropped anchor and Cook landed on the same day. Cook sailed along the coast in a northerly direction for nearly 1,300 miles until 11th June, 1770, when the *Endeavour* was seriously damaged by striking a coral reef in the vicinity of Trinity Bay. Repairs occupied nearly two months, and the *Endeavour* then again set her course to the north, sailing through Torres Strait and anchoring in the Downs on 13th July, 1771. In 1771, Cook was put in command of the ships *Resolution* and *Adventure*, with a view to ascertaining whether a great southern continent existed, and having satisfied himself that, even if it did, it lay so far to the south as to be useless for trade and settlement, he returned to England in 1774. Cook's last voyage was undertaken in 1776, and he met his death on 14th February, 1779, by which date practically the whole coast of Australia had been explored. The only remaining discovery of importance was the existence of a channel between Tasmania and Australia. This was made by Flinders and Bass in 1798.

## § 2. The Annexation of Australia.

1. Annexation of Eastern Part of Australia, 1779. — Although representatives of the nations mentioned in the previous section landed or claimed to have landed on the shores of Australia on various occasions during the sixteenth and seventeenth centuries, it was not until 23rd August, 1770, that the history of Australia was brought into definite political connexion with Western civilization. It was on that date that Captain Cook took possession "of the whole eastern coast, from latitude 38° to this place, latitude 10½° S., in right of His Majesty King George the Third." Cook, however, proclaimed British sovereignty only over what are now the eastern parts of New South Wales and Queensland, and formal possession, on behalf of the British Crown, of the whole of the eastern part of the Australian continent and Tasmania was not taken until 26th January, 1788. It was on this last date that Captain Phillip's commission, first issued to him on 12th October, 1786, and amplified on 2nd April, 1787, was read to the people whom he had brought with him in the "First Fleet."

A full historical account of the period referred to may be found in the *Historical Records of New South Wales* Vol. I, parts 1 and 2.

2. Original Extent of New South Wales.—The commission appointed Phillip "Captain-General and Governor-in-Chief in and over our territory called New South Wales, extending from the Northern Cape or extremity of the coast called Cape York, in the latitude of ten degrees thirty-seven minutes south, to the southern extremity of the said territory of New South Wales or South Cape, in the latitude of forty-three degrees thirty-nine minutes south, and of all the country inland westward as far as the one hundred and thirty-fifth degree of east longitude reckoning from the meridian of Greenwich, including all the islands adjacent in the Pacific Ocean within the latitudes aforesaid of ten degrees thirty-seven minutes south and forty-three degrees thirty-nine minutes south."

Although in November, 1769, Captain Cook had taken possession of the North Island of New Zealand, and in January, 1770, also of the South Island, it is a matter of doubt whether at the time when Captain Phillip's commission was drawn up New Zealand was considered as one of the "islands adjacent in the Pacific Ocean." The facts that under the Supreme Court Act (Imperial) of 1823 British residents in New Zealand were brought under the jurisdiction of the Court at Sydney, while in 1830 there was a proposal on the part of the British Government to appoint a consul in New Zealand, would leave this an open question, as nothing more than extra-territorial jurisdiction may have been intended. Various hoistings of flags notwithstanding, New Zealand does not appear to have unequivocally become British territory until 1840. In that year, on 26th January, Captain Hobson arrived at the Bay of Islands. On the following day he read the commission, which extended the boundaries of the Colony of New South Wales so as to embrace and comprehend the islands of New Zealand. On 5th February, the Treaty of Waitangi, made with the native chiefs, was signed. Finally, on 26th May, British sovereignty over the islands of New Zealand was explicitly proclaimed.

3. Extension of New South Wales Westward, 1825.—On 17th February, 1824, Earl Bathurst advised Sir Thomas Brisbane that he had recommended to His Majesty the dispatch of a ship of war to the north-west coast of New Holland for the purpose of taking possession of the coast between the western coast of Bathurst Island and the eastern side of Coburg Peninsula. Captain James J. Gordon Bremer of H.M.S. *Tamar*, who was selected for the purpose, took possession on 20th September, 1824, of the coast from the 124th to the 126th degree of east longitude. On 16th July, 1825, the whole territory between those boundaries was described in Darling's commission as being within the boundaries of New South Wales, thus increasing its area by 518,134 square miles, and making it, including New Zealand and excluding Tasmania, 2,070,303 square miles, or also excluding New Zealand, 1,972,446 square miles.

4. Annexation of Western Australia, 1827.—An expedition under Major Lockyer, sent by Lieutenant-General Sir Ralph Darling, then Governor of New South Wales, to found a settlement at King George III. Sound, sailed from Sydney on 6th November, 1826, landed at the Sound on 26th December following, and hoisted the British flag. Captain Stirling, in command of H.M.S. *Success*, arrived at Sydney a few weeks after the departure of the expedition to King George's Sound. He obtained the Governor's permission to visit Swan River with a view to seizing a position on the western coast and reporting upon its suitability as a place of settlement. Captain Stirling left Sydney on 17th January, 1827, and on his return in the following April submitted a glowing report on what he described as a "rich and romantic country," urging its occupation for the purpose of settlement. He left England in July, 1827, continuing his advocacy—notwithstanding much discouragement—with unabated enthusiasm. He was at last successful, the result being mainly due to the formation of an association of prospective settlers having capital at their disposal. He was appointed Lieutenant-Governor and with a party of settlers arrived at Garden Island, near the Swan River, in the ship *Parmelia* in June, 1832. On the 2nd of the preceding month Captain Fremantle, in command of H.M.S. *Challenge*, arrived and hoisted the British flag on the south head of Swan River,

again asserting possession of "all that part of New Holland, which is not included within the territory of New South Wales." Thus, before the middle of 1829, the whole territory now known as the Commonwealth of Australia had been constituted a dependency of the United Kingdom.

### § 3. The Creation of the Several Colonies.

1. **New South Wales.**—In Governor Phillip's commission of 1786, the mainland of Australia was divided by the 135th meridian of east longitude into two parts. The earliest colonists believed that the present State of Tasmania was actually joined to the mainland, and it was not till 1798 that the contrary was known. In that year, by sailing through Bass Strait, Flinders and Bass proved that it was an island. The territory of New South Wales, as originally constituted, and of New Zealand, which may be included although Cook's annexation was not properly given effect to until 1840, consisted of 1,584,389 acres. A further area of 518,134 square miles was added in 1825, when the western boundary was extended to the 120th meridian. The territory was subsequently reduced by the separation of various areas to form the other colonies, and at the time of the establishment of the Commonwealth the area of New South Wales was 310,372 square miles.

2. **Tasmania.**—In 1825, Van Diemen's Land, as Tasmania was then called, was politically separated from New South Wales, being constituted a separate colony on 14th June of that year. The area of the colony was 26,215 square miles.

3. **Western Australia.**—The territory westward of the 120th meridian comprising 975,020 square miles was constituted a colony under the name of Western Australia in June, 1829. It was always distinct and independent of New South Wales, though until 1831 the settlement on King George's Sound remained under the latter jurisdiction.

4. **South Australia.**—On 15th August, 1834, the Act 4 and 5 William IV., cap. 95, was passed, creating South Australia a "province," and towards the end of the year 1836 settlement took place. The first Governor, Captain Hindmarsh, R.N., arrived at Holdfast Bay on 28th December, 1836, and on the same day the new colony was officially proclaimed. The new colony embraced 300,850 square miles of territory, lying south of the 26th parallel of south latitude, and between the 121st and 132nd meridians of east longitude. On 10th December, 1861, by the authority of the Imperial Act 24 and 25 Vic., cap. 44, the western boundary of South Australia was extended to coincide with the eastern boundary of Western Australia, namely, the 120th meridian. The area of the extension was approximately 70,220 square miles. Nearly two years later, on 6th July, 1863, the Northern Territory comprising 522,000 square miles was, by letters patent, brought under the jurisdiction of South Australia, which therefore controlled an area of 903,690 square miles.

5. **New Zealand.**—New Zealand, nominally annexed by Captain Cook and formally declared by proclamation in 1840 as a dependency of New South Wales, was, by letters patent of 10th November of that year, constituted a separate colony under the powers of the Act 3 and 4 Vic., cap. 62, of 7th August, 1840. Proclamation of the separation was made on 3rd May, 1841. The area of the colony was 103,862 square miles.

6. **Victoria.**—In 1851, what was known as the "Port Phillip District" of New South Wales, was constituted the colony of Victoria, "bounded on the north and north-west by a straight line drawn from Cape Howe to the nearest source of the River Murray and thence by the course of that river to the eastern boundary of the colony of South Australia." The area of the new colony was 87,884 square miles, and its separate existence took effect from 1st July, 1851, upon the issuing of the writs for the first election of elective members of the Legislative Council.

7. **Queensland.**—The northern squatting districts of Moreton, Darling Downs, Burnett, Wide Bay, Maranoa, Leichhardt and Port Curtis, together with the reputed country of Stanley, were granted an independent administration and formed into a distinct colony under the name of Queensland, by letters patent dated 6th June, 1859,



although separation from New South Wales was not consummated until 10th December, of the same year, upon the assumption of office of the first Governor. The territory comprised in the new colony was so much of the colony of New South Wales as lies northwards of a line commencing on the sea-coast at Point Danger in latitude about 27° of south, running westward along the Macpherson and Dividing Ranges and the Paterson River to the Macintyre River, thence downward to the 24th parallel of south latitude, and following that parallel westerly to the 131st meridian of east longitude, which is the eastern boundary of Western Australia, together with all the adjacent islands, their members, and appurtenances in the Pacific Ocean. The area of the colony thus constituted was 554,300 square miles. By letters patent dated 13th March, 1861, forwarded by the Colonial Secretary to the Governor of Queensland on 12th April, 1862, the area of Queensland was increased by the annexation of "so much of the colony of New South Wales as lies to the northward of the 24th parallel of south latitude, and between the 131st and 135th meridians of east longitude, together with all and every the adjacent islands, their members, and appurtenances, in the Gulf of Carpentaria." With this addition the area of Queensland became 670,500 square miles.

#### § 4. Establishment of the Commonwealth of Australia.

1. *General.*—On 1st January, 1901, the colonies mentioned, with the exception of New Zealand, were federated under the name of the "Commonwealth of Australia," the designation of "Colonies" except in the case of the Northern Territory, to which the designation "Territory" is applied—being at the same time changed into that of "States." The total area of the Commonwealth of Australia is 2,974,581 square miles. The dates of creation and the areas of its component parts, as determined on the final adjustment of their boundaries, are shown below:—

#### THE COMMONWEALTH OF AUSTRALIA: AREA, ETC., OF COMPONENT PARTS.

State.	Year of Formation into Separate Colony.	Present Area in Square Miles.	State.	Year of Formation into Separate Colony.	Present Area in Square Miles.
New South Wales(a)	1786	310,372	Tasmania ..	1825	26,215
Victoria ..	1851	87,884	Northern Territory	1863	523,620
Queensland ..	1859	670,500			
South Australia ..	1834	380,070	Area of the Com-		
Western Australia	1829	975,920	monwealth ..	..	2,974,581

(a) Including the Australian Capital Territory embracing an area of 911 square miles, and 28 square miles at Jervis Bay. See par. 3 below.

2. *Transfer of the Northern Territory to the Commonwealth.*—On 7th December, 1907, the Commonwealth and the State of South Australia entered into an agreement for the surrender to and acceptance by the Commonwealth of the Northern Territory, subject to approval by the Parliaments of the Commonwealth and the State. This approval was given by the South Australian Parliament under the Northern Territory Surrender Act 1907 (assented to on 14th May, 1908), and by the Commonwealth Parliament under the Northern Territory Acceptance Act 1910 (assented to on 16th November, 1910). The Territory was formally transferred to the Commonwealth on 1st January, 1911, and became the Northern Territory of Australia.

3. *Transfer of the Australian Capital Territory to the Commonwealth.*—On 18th October, 1900, the Commonwealth and the State of New South Wales entered into an agreement for the surrender to and acceptance by the Commonwealth of an area of 911 square miles as the seat of Government of the Commonwealth. In December, 1900, Acts were passed by the Commonwealth and New South Wales Parliaments approving the agreement, and on 5th December, 1910, a proclamation was issued vesting the Territory in the Commonwealth on and from 1st January, 1911. By the Jervis Bay

Territory Acceptance Act 1915, an area of 28 square miles at Jervis Bay, surrendered by New South Wales according to an agreement made in 1913, was accepted by the Commonwealth, and was transferred as from 4th September, 1915.

4. *Transfer of British New Guinea or Papua.*—Under the administration of the Commonwealth, but not included in it, is British New Guinea or Papua, finally annexed by the British Government in 1884. This Territory was for a number of years administered by the Queensland Government, but was transferred to the Commonwealth by proclamation on 1st September, 1906, under the authority of the Papua Act (Commonwealth) of 16th November, 1905. The area of Papua is about 99,540 square miles.

5. *Transfer of Norfolk Island.*—Although administered for many years by the Government of New South Wales, this Island was a separate Crown Colony until 1st July, 1914, when it was transferred to the Commonwealth under the authority of the Norfolk Island Act 1913. The Island is situated in latitude  $29^{\circ} 3' 45''$  S. longitude  $167^{\circ} 58' 6''$  E., and comprises an area of 8,528 acres.

6. *Territory of New Guinea.*—It was agreed by the Allied and Associated Powers that a mandate should be conferred on Australia for the government of the former German territories and islands situated in latitude between the Equator and  $8^{\circ}$  S., and in longitude between  $141^{\circ}$  E. and  $159.25^{\circ}$  E. The mandate was issued by the League of Nations on 17th December, 1920. The Governor-General of the Commonwealth was authorized to accept the mandate by the New Guinea Act 1920, which also declared the area to be a Territory under the authority of the Commonwealth by the name of the Territory of New Guinea. The Territory comprises about 93,000 square miles, and the administration under the mandate dated from 9th May, 1921.

7. *Nauru.*—In 1919 the Governments of the United Kingdom, Australia and New Zealand entered into an agreement to make provision for the exercise of the mandate conferred on the British Empire for the administration of the Island of Nauru, and for the mining of the phosphate deposits thereon. The island is situated in longitude  $168^{\circ}$  E., 26 miles south of the Equator, and comprises about 5,400 acres. The agreement provided that the administration of the island should be vested in an administrator, the first appointment to be made by the Commonwealth Government, and thereafter in such manner as the three Governments decided. The agreement was approved by the Commonwealth Parliament in the Nauru Island Agreement Act 1919, and a supplementary agreement of 30th May, 1925, giving the Government in northern command for the administration greater powers of control over the Administrator, was approved in 1932. The administration under the mandate has operated from 17th December, 1920, and so far the administrators have been appointed by the Commonwealth Government.

8. *Territory of Ashmore and Cartier Islands.*—By Imperial Order in Council dated 23rd July, 1931, Ashmore Islands, known as Middle East and West Islands and Cartier Island, situated in the Indian Ocean off the North-west Coast of Australia, were placed under the authority of the Commonwealth. The Islands were accepted by the Commonwealth in the Ashmore and Cartier Islands Acceptance Act 1931 under the name of the Territory of Ashmore and Cartier Islands and were transferred on 10th May, 1934.

9. *Australian Antarctic Territory.*—An Imperial Order in Council, 7th February, 1933, placed under the authority of the Commonwealth the Antarctic Territory, comprising all the islands and territory, other than Adèle Land, situated south of  $60^{\circ}$  S. latitude, and lying between  $160^{\circ}$  E. longitude and  $145^{\circ}$  E. longitude. The Territory was accepted by the Commonwealth under the name of the Australian Antarctic Territory in the Australian Antarctic Territory Acceptance Act 1933.

## § 5. The Exploration of Australia.

A fairly complete, though brief, account of the exploration of Australia was given in Official Year Book No. 2 (pp. 20-39), and a summary of the more important facts relating to the subject was embodied in this Chapter in succeeding issues up to and including No. 22.

## § 6. The Constitutions of the States and of the Commonwealth.

1. *General.*—Information regarding the development of the Constitutions of the various Colonies (now States), together with a brief history of the Federal movement in Australia, was embodied in this Chapter in issues of the Official Year Book up to No. 22.

2. *Commonwealth Constitution Act.*—The Commonwealth of Australia Constitution Act, 63 and 64 Vict., Chapter 12, namely: "An Act to constitute the Commonwealth of Australia," as amended by the Constitution Alteration (Senate Elections) 1906, the Constitution Alteration (State Debts) 1909, and the Constitution Alteration (State Debts) 1928 is given *in extenso* hereunder.

### THE COMMONWEALTH OF AUSTRALIA CONSTITUTION ACT, 63 & 64 VICT., CHAPTER 12.

*An Act to constitute the Commonwealth of Australia. [9th July, 1900.]*

**W**HEREAS the people of New South Wales, Victoria, South Australia, Queensland and Tasmania, humbly relying on the blessing of Almighty God, have agreed to unite in one indissoluble Federal Commonwealth under the Crown of the United Kingdom of Great Britain and Ireland, and under the Constitution hereby established:

And whereas it is expedient to provide for the admission into the Commonwealth of other Australasian Colonies and possessions of the Queen:

Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

1. This Act may be cited as the Commonwealth of Australia Constitution Act.
2. The provisions of this Act referring to the Queen shall extend to Her Majesty's heirs and successors in the sovereignty of the United Kingdom.
3. It shall be lawful for the Queen, with the advice of the Privy Council, to declare by proclamation that, on and after a day therein appointed, not being later than one year after the passing of this Act, the people of New South Wales, Victoria, South Australia, Queensland, and Tasmania, and also, if Her Majesty is satisfied that the people of Western Australia have agreed thereto, of Western Australia, shall be united in a Federal Commonwealth under the name of the Commonwealth of Australia. But the Queen may, at any time after the proclamation, appoint a Governor-General for the Commonwealth.
4. The Commonwealth shall be established, and the Constitution of the Commonwealth shall take effect, on and after the day so appointed. But the Parliaments of the several colonies may at any time after the passing of this Act make any such laws, to come into operation on the day so appointed, as they might have made if the Constitution had taken effect at the passing of this Act.
5. This Act, and all laws made by the Parliament of the Commonwealth under the Constitution, shall be binding on the courts, judges, and people of every State and of every part of the Commonwealth, notwithstanding anything in the laws of any State; and the laws of the Commonwealth shall be in force on all British ships, the Queen's ships of war excepted, whose first port of clearance and whose port of destination are in the Commonwealth.
6. "The Commonwealth" shall mean the Commonwealth of Australia as established under this Act.
- "The States" shall mean such of the colonies of New South Wales, New Zealand, Queensland, Tasmania, Victoria, Western Australia, and South Australia, including the northern territory of South Australia, as for the time being are parts of the Commonwealth, and such colonies or territories as may be admitted into or established by the Commonwealth as States; and each of such parts of the Commonwealth shall be called "a State."
- "Original States" shall mean such States as are parts of the Commonwealth at its establishment.



7. The Federal Council of Australasia Act, 1885, is hereby repealed, but so as not to affect any laws passed by the Federal Council of Australasia and in force at the establishment of the Commonwealth.

Any such law may be repealed as to any State by the Parliament of the Commonwealth, or as to any colony not being a State by the Parliament thereof.

8. After the passing of this Act the Colonial Boundaries Act, 1895, shall not apply to any colony which becomes a State of the Commonwealth; but the Commonwealth shall be taken to be a self-governing colony for the purposes of that Act.

9. The Constitution of the Commonwealth shall be as follows :—

### THE CONSTITUTION.

This Constitution is divided as follows :—

- Chapter I.—The Parliament :
  - Part I.—General :
  - Part II.—The Senate :
  - Part III.—The House of Representatives :
  - Part IV.—Both Houses of the Parliament :
  - Part V.—Powers of the Parliament :
- Chapter II.—The Executive Government :
- Chapter III.—The Judicature :
- Chapter IV.—Finance and Trade :
- Chapter V.—The States :
- Chapter VI.—New States :
- Chapter VII.—Miscellaneous :
- Chapter VIII.—Alteration of the Constitution.
- The Schedule.

### CHAPTER I.—THE PARLIAMENT.

#### PART I.—GENERAL.

1. The legislative power of the Commonwealth shall be vested in a Federal Parliament, which shall consist of the Queen, a Senate, and a House of Representatives, and which is hereinafter called “The Parliament,” or “The Parliament of the Commonwealth.”

2. A Governor-General appointed by the Queen shall be Her Majesty’s representative in the Commonwealth, and shall have and may exercise in the Commonwealth during the Queen’s pleasure, but subject to this Constitution, such powers and functions of the Queen as Her Majesty may be pleased to assign to him.

3. There shall be payable to the Queen out of the Consolidated Revenue Fund of the Commonwealth, for the salary of the Governor-General, an annual sum which, until the Parliament otherwise provides, shall be ten thousand pounds.

The salary of a Governor-General shall not be altered during his continuance in office.

4. The provisions of this Constitution relating to the Governor-General extend and apply to the Governor-General for the time being, or such person as the Queen may appoint to administer the Government of the Commonwealth; but no such person shall be entitled to receive any salary from the Commonwealth in respect of any other office during his administration of the Government of the Commonwealth.

5. The Governor-General may appoint such times for holding the sessions of the Parliament as he thinks fit, and may also from time to time, by Proclamation or otherwise, prorogue the Parliament, and may in like manner dissolve the House of Representatives.

After any general election the Parliament shall be summoned to meet not later than thirty days after the day appointed for the return of the writs.

The Parliament shall be summoned to meet not later than six months after the establishment of the Commonwealth.

6. There shall be a session of the Parliament once at least in every year, so that twelve months shall not intervene between the last sitting of the Parliament in one session and its first sitting in the next session.

## PART II.—THE SENATE.

7. The Senate shall be composed of senators for each State, directly chosen by the people of the State, voting, until the Parliament otherwise provides, as one electorate.

But until the Parliament of the Commonwealth otherwise provides, the Parliament of the State of Queensland, if that State be an Original State, may make laws dividing the State into divisions and determining the number of senators to be chosen for each division, and in the absence of such provision the State shall be one electorate.

Until the Parliament otherwise provides there shall be six senators for each Original State. The Parliament may make laws increasing or diminishing the number of senators for each State, but so that equal representation of the several Original States shall be maintained and that no Original State shall have less than six senators.

The senators shall be chosen for a term of six years, and the names of the senators chosen for each State shall be certified by the Governor to the Governor-General.

8. The qualification of electors of senators shall be in each State that which is prescribed by this Constitution, or by the Parliament, as the qualification for electors of members of the House of Representatives; but in the choosing of senators each elector shall vote only once.

9. The Parliament of the Commonwealth may make laws prescribing the method of choosing senators, but so that the method shall be uniform for all the States. Subject to any such law, the Parliament of each State may make laws prescribing the method of choosing the senators for that State.

The Parliament of a State may make laws for determining the times and places of elections of senators for the State.

10. Until the Parliament otherwise provides, but subject to this Constitution, the laws in force in each State, for the time being, relating to elections for the more numerous House of the Parliament of the State shall, as nearly as practicable, apply to elections of senators for the State.

11. The Senate may proceed to the despatch of business, notwithstanding the failure of any State to provide for its representation in the Senate.

12. The Governor of any State may cause writs to be issued for elections of senators for the State. In case of the dissolution of the Senate the writs shall be issued within ten days from the proclamation of such dissolution.

13. As soon as may be after the Senate first meets, and after each first meeting of the Senate following a dissolution thereof, the Senate shall divide the Senators chosen for each State into two classes, as nearly equal in number as practicable; and the places of the Senators of the first class shall become vacant at the expiration of [the third year] *three years*,\* and the places of those of the second class at the expiration of [the sixth year] *six years*,\* from the beginning of their term of service; and afterwards the places of senators shall become vacant at the expiration of six years from the beginning of their term of service.

The election to fill vacant places shall be made [in the year at the expiration of which] *within one year before*\* the places are to become vacant.

For the purposes of this section the term of service of a senator shall be taken to begin on the first day of [January] *July*\* following the day of his election, except in the cases of the first election and of the election next after any dissolution of the Senate, when it shall be taken to begin on the first day of [January] *July*\* preceding the day of his election.

14. Whenever the number of senators for a State is increased or diminished, the Parliament of the Commonwealth may make such provision for the vacating of the places of senators for the State as it deems necessary to maintain regularity in the rotation.

15. If the place of a Senator becomes vacant before the expiration of his term of service, the Houses of Parliament of the State for which he was chosen shall, sitting and voting together, choose a person to hold the place until the expiration of the term, or until the election of a successor as hereinafter provided, whichever first happens. But if the Houses of Parliament of the State are not in session at the time when the vacancy

\* As amended by Section 2 of the Constitution Alteration (Senate Elections) 1906. The words in square brackets have been repealed; amendments are shown in italics.

is notified, the Governor of the State, with the advice of the Executive Council thereof, may appoint a person to hold the place until the expiration of fourteen days after the beginning of the next session of the Parliament of the State, or until the election of a successor, whichever first happens.

At the next general election of members of the House of Representatives, or at the next election of senators for the State, whichever first happens, a successor shall, if the term has not then expired, be chosen to hold the place from the date of his election until the expiration of the term.

The name of any senator so chosen or appointed shall be certified by the Governor of the State to the Governor-General.

16. The qualifications of a senator shall be the same as those of a member of the House of Representatives.

17. The Senate shall, before proceeding to the despatch of any other business, choose a senator to be the President of the Senate; and as often as the office of President becomes vacant the Senate shall again choose a senator to be the President.

The President shall cease to hold his office if he ceases to be a senator. He may be removed from office by a vote of the Senate, or he may resign his office or his seat by writing addressed to the Governor-General.

18. Before or during any absence of the President, the Senate may choose a senator to perform his duties in his absence.

19. A senator may, by writing addressed to the President, or to the Governor-General if there is no President or if the President is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

20. The place of a senator shall become vacant if for two consecutive months of any session of the Parliament he, without the permission of the Senate, fails to attend the Senate.

21. Whenever a vacancy happens in the Senate, the President, or if there is no President or if the President is absent from the Commonwealth the Governor-General, shall notify the same to the Governor of the State in the representation of which the vacancy has happened.

22. Until the Parliament otherwise provides, the presence of at least one-third of the whole number of the senators shall be necessary to constitute a meeting of the Senate for the exercise of its powers.

23. Questions arising in the Senate shall be determined by a majority of votes, and each senator shall have one vote. The President shall in all cases be entitled to a vote; and when the votes are equal the question shall pass in the negative.

### PART III.—THE HOUSE OF REPRESENTATIVES.

24. The House of Representatives shall be composed of members directly chosen by the people of the Commonwealth, and the number of such members shall be, as nearly as practicable, twice the number of the senators.

The number of members chosen in the several States shall be in proportion to the respective numbers of their people, and shall, until the Parliament otherwise provides, be determined, whenever necessary, in the following manner:—

- (i) A quota shall be ascertained by dividing the number of the people of the Commonwealth, as shown by the latest statistics of the Commonwealth, by twice the number of the senators;
- (ii) The number of members to be chosen in each State shall be determined by dividing the number of the people of the State, as shown by the latest statistics of the Commonwealth, by the quota; and if on such division there is a remainder greater than one-half of the quota, one more member shall be chosen in the State.

But notwithstanding anything in this section, five members at least shall be chosen in each Original State.



25. For the purposes of the last section, if by the law of any State all persons of any race are disqualified from voting at elections for the more numerous House of the Parliament of the State, then, in reckoning the number of the people of the State or of the Commonwealth, persons of that race resident in that State shall not be counted.

26. Notwithstanding anything in section twenty-four, the number of members to be chosen in each State at the first election shall be as follows :—

New South Wales ..	23	South Australia ..	6
Victoria ..	20	Tasmania ..	5
Queensland ..	8		

Provided that if Western Australia is an Original State, the numbers shall be as follows :—

New South Wales ..	26	South Australia ..	7
Victoria ..	23	Western Australia ..	5
Queensland ..	9	Tasmania ..	5

27. Subject to this Constitution, the Parliament may make laws for increasing or diminishing the number of the members of the House of Representatives.

28. Every House of Representatives shall continue for three years from the first meeting of the House, and no longer, but may be sooner dissolved by the Governor-General.

29. Until the Parliament of the Commonwealth otherwise provides, the Parliament of any State may make laws for determining the divisions in each State for which members of the House of Representatives may be chosen, and the number of members to be chosen for each division. A division shall not be formed out of parts of different States.

In the absence of other provisions, each State shall be one electorate.

30. Until the Parliament otherwise provides, the qualification of electors of members of the House of Representatives shall be in each State that which is prescribed by the law of the State as the qualification of electors of the more numerous House of Parliament of the State; but in the choosing of members each elector shall vote only once\*.

31. Until the Parliament otherwise provides, but subject to this Constitution, the laws in force in each State for the time being relating to elections for the more numerous House of the Parliament of the State shall, as nearly as practicable, apply to elections in the State of members of the House of Representatives.

32. The Governor-General in Council may cause writs to be issued for general elections of members of the House of Representatives.

After the first general election, the writs shall be issued within ten days from the expiry of a House of Representatives or from the proclamation of a dissolution thereof.

33. Whenever a vacancy happens in the House of Representatives, the Speaker shall issue his writ for the election of a new member, or if there is no Speaker or if he is absent from the Commonwealth the Governor-General in Council may issue the writ.

34. Until the Parliament otherwise provides, the qualifications of a member of the House of Representatives shall be as follows :—

(i) He must be of the full age of twenty-one years, and must be an elector entitled to vote at the election of members of the House of Representatives, or a person qualified to become such elector, and must have been for three years at the least a resident within the limits of the Commonwealth as existing at the time when he is chosen :

(ii) He must be a subject of the Queen, either natural-born or for at least five years naturalized under a law of the United Kingdom, of a colony which has become or becomes a State, or of the Commonwealth, or of a State.

35. The House of Representatives shall, before proceeding to the despatch of any other business, choose a member to be the Speaker of the House, and as often as the office of Speaker becomes vacant the House shall again choose a member to be the Speaker.

\* The Parliament has otherwise provided, by means of the Commonwealth Electoral Act 1918-1931 Section 39 (repealing an earlier provision made by the Commonwealth Franchise Act 1902).

The Speaker shall cease to hold his office if he ceases to be a member. He may be removed from office by a vote of the House, or he may resign his office or his seat by writing addressed to the Governor-General.

36. Before or during any absence of the Speaker, the House of Representatives may choose a member to perform his duties in his absence.

37. A member may by writing addressed to the Speaker, or to the Governor-General if there is no Speaker or if the Speaker is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

38. The place of a member shall become vacant if for two consecutive months of any session of the Parliament he, without the permission of the House, fails to attend the House.

39. Until the Parliament otherwise provides, the presence of at least one-third of the whole number of the members of the House of Representatives shall be necessary to constitute a meeting of the House for the exercise of its powers.

40. Questions arising in the House of Representatives shall be determined by a majority of votes other than that of the Speaker. The Speaker shall not vote unless the numbers are equal, and then he shall have a casting vote.

#### PART IV.—BOTH HOUSES OF THE PARLIAMENT.

41. No adult person who has or acquires a right to vote at elections for the more numerous House of the Parliament of a State shall, while the right continues, be prevented by any law of the Commonwealth from voting at elections for either House of the Parliament of the Commonwealth.

42. Every senator and every member of the House of Representatives shall before taking his seat make and subscribe before the Governor-General, or some person authorized by him, an oath or affirmation of allegiance in the form set forth in the schedule to this Constitution.

43. A member of either House of the Parliament shall be incapable of being chosen or of sitting as a member of the other House.

44. Any person who—

- (i) Is under any acknowledgement of allegiance, obedience, or adherence to a foreign power, or is a subject or a citizen or entitled to the rights or privileges of a subject or a citizen of a foreign power : or
- (ii) Is attainted of treason, or has been convicted and is under sentence, or subject to be sentenced, for any offence punishable under the law of the Commonwealth or of a State by imprisonment for one year or longer : or
- (iii) Is an undischarged bankrupt or insolvent : or
- (iv) Holds any office of profit under the Crown, or any pension payable during the pleasure of the Crown out of any of the revenues of the Commonwealth : or
- (v) Has any direct or indirect pecuniary interest in any agreement with the Public Service of the Commonwealth otherwise than as a member and in common with the other members of an incorporated company consisting of more than twenty-five persons :

shall be incapable of being chosen or of sitting as a senator or a member of the House of Representatives.

But sub-section iv. does not apply to the office of any of the Queen's Ministers of State for the Commonwealth, or of any of the Queen's Ministers for a State, or to the receipt of pay, half-pay, or a pension by any person as an officer or member of the Queen's navy or army, or to the receipt of pay as an officer or member of the naval or military forces of the Commonwealth by any person whose services are not wholly employed by the Commonwealth :

45. If a senator or member of the House of Representatives—

- (i) Becomes subject to any of the disabilities mentioned in the last preceding section : or

- (ii) Takes the benefit, whether by assignment, composition, or otherwise, of any law relating to bankrupt or insolvent debtors : or
  - (iii) Directly or indirectly takes or agrees to take any fee or honorarium for services rendered to the Commonwealth, or for services rendered in the Parliament to any person or State :
- his place shall thereupon become vacant.

46. Until the Parliament otherwise provides, any person declared by this Constitution to be incapable of sitting as a senator or as a member of the House of Representatives shall, for every day on which he so sits, be liable to pay the sum of one hundred pounds to any person who sues for it in any court of competent jurisdiction.

47. Until the Parliament otherwise provides, any question respecting the qualification of a senator or of a member of the House of Representatives, or respecting a vacancy in either House of the Parliament, and any question of a disputed election to either House, shall be determined by the House in which the question arises.

48. Until the Parliament otherwise provides, each senator and each member of the House of Representatives shall receive an allowance of four hundred pounds a year, to be reckoned from the day on which he takes his seat.\*

49. The powers, privileges, and immunities of the Senate and of the House of Representatives, and of the members and the committees of each House, shall be such as are declared by the Parliament, and until declared shall be those of the Commons House of Parliament of the United Kingdom, and of its members and committees, at the establishment of the Commonwealth.

50. Each House of the Parliament may make rules and orders with respect to—

- (i) The mode in which its powers, privileges, and immunities may be exercised and upheld :
- (ii) The order and conduct of its business and proceedings either separately or jointly with the other House.

#### PART V.—POWERS OF THE PARLIAMENT.†

51. The Parliament shall, subject to this Constitution, have power to make laws for the peace, order, and good government of the Commonwealth with respect to—

- (i) Trade and commerce with other countries, and among the States :
- (ii) Taxation ; but so as not to discriminate between States or parts of States :
- (iii) Bounties on the production or export of goods, but so that such bounties shall be uniform throughout the Commonwealth :
- (iv) Borrowing money on the public credit of the Commonwealth :
- (v) Postal, telegraphic, telephonic, and other like services :
- (vi) The naval and military defence of the Commonwealth and of the several States, and the control of the forces to execute and maintain the laws of the Commonwealth :
- (vii) Lighthouses, lightships, beacons and buoys :
- (viii) Astronomical and meteorological observations :
- (ix) Quarantine :
- (x) Fisheries in Australian waters beyond territorial limits :
- (xi) Census and statistics :
- (xii) Currency, coinage, and legal tender :
- (xiii) Banking, other than State banking ; also State banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money :

\* The Parliamentary allowance was raised to £600 per annum in 1907 and to £1,000 per annum in 1920, but in the case of Ministers, the Presiding Officers of the two Houses, and the Chairmen of Committees, the allowance was fixed at £500 per annum. Several reductions under financial emergency legislation reduced the allowance to £750 per annum in 1932, but it was gradually restored to £1,000, the last reduction being removed in May, 1938. The latter Act also increased the allowance to holders of Parliamentary Office to £1,000 per annum.

† Particulars of proposed laws which were submitted to referenda are referred to in Chapter III., General Government.



- (xiv) Insurance, other than State insurance; also State insurance extending beyond the limits of the State concerned:
- (xv) Weights and measures:
- (xvi) Bills of exchange and promissory notes:
- (xvii) Bankruptcy and insolvency:
- (xviii) Copyrights, patents of inventions and designs, and trade marks:
- (xix) Naturalization and aliens:
- (xx) Foreign corporations, and trading or financial corporations formed within the limits of the Commonwealth:
- (xxi) Marriage:
- (xxii) Divorce and matrimonial causes; and in relation thereto, parental rights, and the custody and guardianship of infants:
- (xxiii) Invalid and old-age pensions:
- (xxiv) The service and execution throughout the Commonwealth of the civil and criminal process and the judgments of the courts of the States:
- (xxv) The recognition throughout the Commonwealth of the laws, the public Acts and records, and the judicial proceedings of the States:
- (xxvi) The people of any race, other than the aboriginal race in any State, for whom it is deemed necessary to make special laws:
- (xxvii) Immigration and emigration:
- (xxviii) The influx of criminals:
- (xxix) External affairs:
- (xxx) The relations of the Commonwealth with the islands of the Pacific:
- (xxxi) The acquisition of property on just terms from any State or person for any purpose in respect of which the Parliament has power to make laws:
- (xxxii) The control of railways with respect to transport for the naval and military purposes of the Commonwealth:
- (xxxiii) The acquisition, with the consent of a State, of any railways of the State on terms arranged between the Commonwealth and the State:
- (xxxiv) Railway construction and extension in any State with the consent of that State:
- (xxxv) Conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State:
- (xxxvi) Matters in respect of which this Constitution makes provision until the Parliament otherwise provides:
- (xxxvii) Matters referred to the Parliament of the Commonwealth by the Parliament or Parliaments of any State or States, but so that the law shall extend only to States by whose Parliaments the matter is referred, or which afterwards adopt the law:
- (xxxviii) The exercise within the Commonwealth, at the request or with the concurrence of the Parliaments of all the States directly concerned, of any power which can at the establishment of this Constitution be exercised only by the Parliament of the United Kingdom or by the Federal Council of Australasia:
- (xxxix) Matters incidental to the execution of any power vested by this Constitution in the Parliament or in either House thereof, or in the Government of the Commonwealth, or in the Federal Judicature, or in any department or officer of the Commonwealth.

52. The Parliament shall, subject to this Constitution, have exclusive power to make laws for the peace, order, and good government of the Commonwealth with respect to—

- (i) The seat of Government of the Commonwealth, and all places acquired by the Commonwealth for public purposes:
- (ii) Matters relating to any department of the public service the control of which is by this Constitution transferred to the Executive Government of the Commonwealth:
- (iii) Other matters declared by this Constitution to be within the exclusive power of the Parliament.

53. Proposed laws appropriating revenue or moneys, or imposing taxation, shall not originate in the Senate. But a proposed law shall not be taken to appropriate revenue or moneys, or to impose taxation, by reason only of its containing provisions for the imposition or appropriation of fines or other pecuniary penalties, or for the demand or payment or appropriation of fees for licences, or fees for services under the proposed law.

The Senate may not amend proposed laws imposing taxation, or proposed laws appropriating revenue or moneys for the ordinary annual services of the Government.

The Senate may not amend any proposed laws so as to increase any proposed charge or burden on the people.

The Senate may at any stage return to the House of Representatives any proposed law which the Senate may not amend, requesting, by message, the omission or amendment of any items or provisions therein. And the House of Representatives may, if it thinks fit, make any of such omissions or amendments, with or without modifications.

Except as provided in this section, the Senate shall have equal power with the House of Representatives in respect of all proposed laws.

54. The proposed law which appropriates revenue or moneys for the ordinary annual services of the Government shall deal only with such appropriation.

55. Laws imposing taxation shall deal only with the imposition of taxation, and any provisions therein dealing with any other matter shall be of no effect.

Laws imposing taxation, except laws imposing duties of customs or of excise, shall deal with one subject of taxation only; but laws imposing duties of customs shall deal with duties of customs only, and laws imposing duties of excise shall deal with duties of excise only.

56. A vote, resolution, or proposed law for the appropriation of revenue or moneys shall not be passed unless the purpose of the appropriation has in the same session been recommended by message of the Governor-General to the House in which the proposal originated.

57. If the House of Representatives passes any proposed law, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, and if after an interval of three months the House of Representatives, in the same or the next session, again passes the proposed law with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may dissolve the Senate and the House of Representatives simultaneously. But such dissolution shall not take place within six months before the date of the expiry of the House of Representatives by effluxion of time.

If after such dissolution the House of Representatives again passes the proposed law, with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may convene a joint sitting of the members of the Senate and of the House of Representatives.

The members present at the joint sitting may deliberate and shall vote together upon the proposed law as last proposed by the House of Representatives, and upon amendments, if any, which have been made therein by one House and not agreed to by the other, and any such amendments which are affirmed by an absolute majority of the total number of the members of the Senate and House of Representatives shall be taken to have been carried, and if the proposed law, with the amendments, if any, so carried is affirmed by an absolute majority of the total number of members of the Senate and House of Representatives, it shall be taken to have been duly passed by both Houses of the Parliament, and shall be presented to the Governor-General for the Queen's assent.

58. When a proposed law passed by both Houses of the Parliament is presented to the Governor-General for the Queen's assent, he shall declare, according to his discretion, but subject to this Constitution, that he assents in the Queen's name, or that he withholds assent, or that he reserves the law for the Queen's pleasure.

The Governor-General may return to the House in which it originated any proposed law so presented to him, and may transmit therewith any amendments which he may recommend, and the Houses may deal with the recommendation.

59. The Queen may disallow any law within one year from the Governor-General's assent, and such disallowance on being made known by the Governor-General by speech or message to each of the Houses of the Parliament, or by Proclamation, shall annul the law from the day when the disallowance is so made known.

60. A proposed law reserved for the Queen's pleasure shall not have any force unless and until within two years from the day on which it was presented to the Governor-General for the Queen's assent the Governor-General makes known, by speech or message to each of the Houses of the Parliament, or by Proclamation, that it has received the Queen's assent.

## CHAPTER II.—THE EXECUTIVE GOVERNMENT.

61. The executive power of the Commonwealth is vested in the Queen and is exercisable by the Governor-General as the Queen's representative, and extends to the execution and maintenance of this Constitution, and of the laws of the Commonwealth.

62. There shall be a Federal Executive Council to advise the Governor-General in the government of the Commonwealth, and the members of the Council shall be chosen and summoned by the Governor-General and sworn as Executive Councillors, and shall hold office during his pleasure.

63. The provisions of this Constitution referring to the Governor-General in Council shall be construed as referring to the Governor-General acting with the advice of the Federal Executive Council.

64. The Governor-General may appoint officers to administer such departments of State of the Commonwealth as the Governor-General in Council may establish.

Such officers shall hold office during the pleasure of the Governor-General. They shall be members of the Federal Executive Council, and shall be the Queen's Ministers of State for the Commonwealth.

After the first general election no Minister of State shall hold office for a longer period than three months unless he is or becomes a senator or a member of the House of Representatives.

65. Until the Parliament otherwise provides, the Ministers of State shall not exceed seven in number, and shall hold such offices as the Parliament prescribes, or, in the absence of provision, as the Governor-General directs.\*

66. There shall be payable to the Queen out of the Consolidated Revenue Fund of the Commonwealth, for the salaries of the Ministers of State, an annual sum which until the Parliament otherwise provides, shall not exceed twelve thousand pounds a year.\*

67. Until the Parliament otherwise provides, the appointment and removal of all other officers of the Executive Government of the Commonwealth shall be vested in the Governor-General in Council, unless the appointment is delegated by the Governor-General in Council or by a law of the Commonwealth to some other authority.

68. The command in chief of the naval and military forces of the Commonwealth is vested in the Governor-General as the Queen's representative.

69. On a date or dates to be proclaimed by the Governor-General after the establishment of the Commonwealth the following departments of the public service in each State shall become transferred to the Commonwealth :—

Posts, telegraphs, and telephones :	Lighthouses, lightships, beacons, and buoys :
Naval and military defence :	Quarantine.

\* The Ministers of State were increased in 1915 to eight, in 1917 to nine, in 1935 to ten, in 1938 to eleven, and in 1941 to nineteen. A sum of £1,650 was added to the annual appropriation for Ministers' salaries for each additional Minister and £500 per annum was allowed each Minister by the Parliamentary Allowances Act 1920. Reductions under financial emergency legislation reached their maximum in 1932, when Ministers' salaries were reduced by 30 per cent. and their allowances as members by 25 per cent.; the reductions were gradually removed, finally in May, 1938, by the Parliamentary Salaries Adjustment Act 1938. This Act also made provision for an additional allowance of £1,500 per annum to the Prime Minister, and increased the parliamentary allowance to Ministers from £500 to £1,000 per annum. The Ministers of State Act 1941, made provision for the salaries of Ministers, the appropriation not to exceed £22,750.



But the departments of customs and of excise in each State shall become transferred to the Commonwealth on its establishment.

70. In respect of matters which, under this Constitution, pass to the Executive Government of the Commonwealth, all powers and functions which at the establishment of the Commonwealth are vested in the Governor of a Colony, or in the Governor of a Colony with the advice of his Executive Council, or in any authority of a Colony, shall vest in the Governor-General, or in the Governor-General in Council, or in the authority exercising similar powers under the Commonwealth, as the case requires.

### CHAPTER III.—THE JUDICATURE.

71. The judicial power of the Commonwealth shall be vested in a Federal Supreme Court, to be called the High Court of Australia, and in such other federal courts as the Parliament creates, and in such other courts as it invests with federal jurisdiction. The High Court shall consist of a Chief Justice, and so many other Justices, not less than two, as the Parliament prescribes.

72. The Justices of the High Court and of the other Courts created by the Parliament—

(i) Shall be appointed by the Governor-General in Council :

(ii) Shall not be removed except by the Governor-General in Council, on an address from both Houses of the Parliament in the same session, praying for such removal on the ground of proved misbehaviour or incapacity :

(iii) Shall receive such remuneration as the Parliament may fix : but the remuneration shall not be diminished during their continuance in office.

73. The High Court shall have jurisdiction, with such exception and subject to such regulations as the Parliament prescribes, to hear and determine appeals from all judgments, decrees, orders, and sentences—

(i) Of any Justice or Justices exercising the original jurisdiction of the High Court :

(ii) Of any other federal court, or court exercising federal jurisdiction : or of the Supreme Court of any State, or of any other court of any State from which at the establishment of the Commonwealth an appeal lies to the Queen in Council :

(iii) Of the Inter-State Commission, but as to questions of law only :

and the judgment of the High Court in all such cases shall be final and conclusive.

But no exception or regulation prescribed by the Parliament shall prevent the High Court from hearing and determining any appeal from the Supreme Court of a State in any matter in which at the establishment of the Commonwealth an appeal lies from such Supreme Court to the Queen in Council.

Until the Parliament otherwise provides, the conditions of and restrictions on appeals to the Queen in Council from the Supreme Courts of the several States shall be applicable to appeals from them to the High Court.

74. No appeal shall be permitted to the Queen in Council from a decision of the High Court upon any question, howsoever arising, as to the limits *inter se* of the Constitutional powers of the Commonwealth and those of any State or States, or as to the limits *inter se* of the Constitutional powers of any two or more States, unless the High Court shall certify that the question is one which ought to be determined by Her Majesty in Council.

The High Court may so certify if satisfied that for any special reason the certificate should be granted, and thereupon an appeal shall lie to Her Majesty in Council on the question without further leave.

Except as provided in this section, this Constitution shall not impair any right which the Queen may be pleased to exercise by virtue of Her Royal prerogative to grant special leave of appeal from the High Court to Her Majesty in Council. The Parliament may make laws limiting the matters in which such leave may be asked, but proposed laws containing any such limitation shall be reserved by the Governor-General for Her Majesty's pleasure.

75. In all matters—

- (i) Arising under any treaty :
- (ii) Affecting consuls or other representatives of other countries :
- (iii) In which the Commonwealth, or a person suing or being sued on behalf of the Commonwealth, is a party :
- (iv) Between States, or between residents of different States, or between a State and a resident of another State :
- (v) In which a writ of Mandamus or prohibition or an injunction is sought against an officer of the Commonwealth :

the High Court shall have original jurisdiction.

76. The Parliament may make laws conferring original jurisdiction on the High Court in any matter—

- (i) Arising under this Constitution, or involving its interpretation :
- (ii) Arising under any laws made by the Parliament :
- (iii) Of Admiralty and maritime jurisdiction :
- (iv) Relating to the same subject-matter claimed under the laws of different States.

77. With respect to any of the matters mentioned in the last two sections the Parliament may make laws—

- (i) Defining the jurisdiction of any federal court other than the High Court :
- (ii) Defining the extent to which the jurisdiction of any federal court shall be exclusive of that which belongs to or is invested in the courts of the States :
- (iii) Investing any court of a State with federal jurisdiction.

78. The Parliament may make laws conferring rights to proceed against the Commonwealth or a State in respect of matters within the limits of the judicial power.

79. The federal jurisdiction of any court may be exercised by such number of judges as the Parliament prescribes.

80. The trial on indictment of any offence against any law of the Commonwealth shall be by jury, and every such trial shall be held in the State where the offence was committed, and if the offence was not committed within any State the trial shall be held at such place or places as the Parliament prescribes.

#### CHAPTER IV.—FINANCE AND TRADE.

81. All revenues or moneys raised or received by the Executive Government of the Commonwealth shall form one Consolidated Revenue Fund, to be appropriated for the purposes of the Commonwealth in the manner and subject to the charges and liabilities imposed by this Constitution.

82. The costs, charges, and expenses incident to the collection, management, and receipt of the Consolidated Revenue Fund shall form the first charge thereon ; and the revenue of the Commonwealth shall in the first instance be applied to the payment of the expenditure of the Commonwealth.

83. No money shall be drawn from the Treasury of the Commonwealth except under appropriation made by law.

But until the expiration of one month after the first meeting of the Parliament the Governor-General in Council may draw from the Treasury and expend such moneys as may be necessary for the maintenance of any department transferred to the Commonwealth and for the holding of the first elections for the Parliament.

84. When any department of the public service of a State becomes transferred to the Commonwealth, all officers of the department shall become subject to the control of the Executive Government of the Commonwealth.

Any such officer who is not retained in the service of the Commonwealth shall, unless he is appointed to some other office of equal emolument in the public service of the State, be entitled to receive from the State any pension, gratuity, or other compensation, payable under the law of the State on the abolition of his office.

Any such officer who is retained in the service of the Commonwealth shall preserve all his existing and accruing rights, and shall be entitled to retire from office at the time, and on the pension or retiring allowance, which would be permitted by the law of the State if his service with the Commonwealth were a continuation of his service with the State. Such pension or retiring allowance shall be paid to him by the Commonwealth; but the State shall pay to the Commonwealth a part thereof, to be calculated on the proportion which his term of service with the State bears to his whole term of service, and for the purpose of the calculation his salary shall be taken to be that paid to him by the State at the time of the transfer.

Any officer who is, at the establishment of the Commonwealth, in the public service of a State, and who is, by consent of the Governor of the State with the advice of the Executive Council thereof, transferred to the public service of the Commonwealth, shall have the same rights as if he had been an officer of a department transferred to the Commonwealth and were retained in the service of the Commonwealth.

85. When any department of the public service of a State is transferred to the Commonwealth—

- (i) All property of the State of any kind, used exclusively in connexion with the department, shall become vested in the Commonwealth; but, in the case of the departments controlling customs and excise and bounties, for such time only as the Governor-General in Council may declare to be necessary;
- (ii) The Commonwealth may acquire any property of the State, of any kind used, but not exclusively used in connexion with the department; the value thereof shall, if no agreement can be made, be ascertained in, as nearly as may be, the manner in which the value of land, or of an interest in land, taken by the State for public purposes is ascertained under the law of the State in force at the establishment of the Commonwealth;
- (iii) The Commonwealth shall compensate the State for the value of any property passing to the Commonwealth under this section; if no agreement can be made as to the mode of compensation, it shall be determined under laws to be made by the Parliament;
- (iv) The Commonwealth shall, at the date of the transfer, assume the current obligations of the State in respect of the department transferred.

86. On the establishment of the Commonwealth, the collection and control of duties of customs and of excise, and the control of the payment of bounties, shall pass to the Executive Government of the Commonwealth.

87. During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, of the net revenue of the Commonwealth from duties of customs and of excise not more than one-fourth shall be applied annually by the Commonwealth towards its expenditure.

The balance shall, in accordance with this Constitution, be paid to the several States, or applied towards the payment of interest on debts of the several States taken over by the Commonwealth.

88. Uniform duties of customs shall be imposed within two years after the establishment of the Commonwealth.

89. Until the imposition of uniform duties of customs—

- (i) The Commonwealth shall credit to each State the revenues collected therein by the Commonwealth.
- (ii) The Commonwealth shall debit to each State—
  - (a) The expenditure therein of the Commonwealth incurred solely for the maintenance or continuance, as at the time of transfer, of any department transferred from the State to the Commonwealth;
  - (b) The proportion of the State, according to the number of its people, in the other expenditure of the Commonwealth.
- (iii) The Commonwealth shall pay to each State month by month the balance (if any) in favour of the State.



90. On the imposition of uniform duties of customs the power of the Parliament to impose duties of customs and of excise, and to grant bounties on the production or export of goods, shall become exclusive.

On the imposition of uniform duties of customs all laws of the several States imposing duties of customs or of excise, or offering bounties on the production or export of goods, shall cease to have effect, but any grant of or agreement for any such bounty lawfully made by or under the authority of the Government of any State shall be taken to be good if made before the thirtieth day of June, one thousand eight hundred and ninety eight, and not otherwise.

91. Nothing in this Constitution prohibits a State from granting any aid to or bounty on mining for gold, silver, or other metals, nor from granting, with the consent of both Houses of the Parliament of the Commonwealth expressed by resolution, any aid to or bounty on the production or export of goods.

92. On the imposition of uniform duties of customs, trade, commerce, and intercourse among the States, whether by means of internal carriage or ocean navigation, shall be absolutely free.

But notwithstanding anything in this Constitution, goods imported before the imposition of uniform duties of customs into any State, or into any Colony which, whilst the goods remain therein, becomes a State, shall, on thence passing into another State within two years after the imposition of such duties, be liable to any duty chargeable on the importation of such goods into the Commonwealth, less any duty paid in respect of the goods on their importation.

93. During the first five years after the imposition of uniform duties of customs, and thereafter until the Parliament otherwise provides—

(i) The duties of customs chargeable on goods imported into a State and afterwards passing into another State for consumption, and the duties of excise paid on goods produced or manufactured in a State and afterwards passing into another State for consumption, shall be taken to have been collected not in the former but in the latter State :

(ii) Subject to the last sub-section, the Commonwealth shall credit revenue, debit expenditure, and pay balances to the several States as prescribed for the period preceding the imposition of uniform duties of customs.

94. After five years from the imposition of uniform duties of customs, the Parliament may provide, on such basis as it deems fair, for the monthly payment to the several States of all surplus revenue of the Commonwealth.

95. Notwithstanding anything in this Constitution, the Parliament of the State of Western Australia, if that State be an Original State, may, during the first five years after the imposition of uniform duties of customs, impose duties of customs on goods passing into that State and not originally imported from beyond the limits of the Commonwealth : and such duties shall be collected by the Commonwealth.

But any duty so imposed on any goods shall not exceed during the first of such years the duty chargeable on the goods under the law of Western Australia in force at the imposition of uniform duties, and shall not exceed during the second, third, fourth, and fifth of such years respectively, four-fifths, three-fifths, two-fifths, and one-fifth of such latter duty, and all duties imposed under this section shall cease at the expiration of the fifth year after the imposition of uniform duties.

If at any time during the five years the duty on any goods under this section is higher than the duty imposed by the Commonwealth on the importation of the like goods, than such higher duty shall be collected on the goods when imported into Western Australia from beyond the limits of the Commonwealth.

96. During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, the Parliament may grant financial assistance to any State on such terms and conditions as the Parliament thinks fit.

97. Until the Parliament otherwise provides, the laws in force in any Colony which has become or becomes a State with respect to the receipt of revenue and the expenditure of money on account of the Government of the Colony, and the review and audit of such

receipt and expenditure, shall apply to the receipt of revenue and the expenditure of money on account of the Commonwealth in the State in the same manner as if the Commonwealth, or the Government or an officer of the Commonwealth, were mentioned whenever the Colony, or the Government or an officer of the Colony, is mentioned.

98. The power of the Parliament to make laws with respect to trade and commerce extends to navigation and shipping, and to railways the property of any State.

99. The Commonwealth shall not, by any law or regulation of trade, commerce, or revenue, give preference to one State or any part thereof over another State or any part thereof.

100. The Commonwealth shall not, by any law or regulation of trade or commerce, abridge the right of a State or of the residents therein to the reasonable use of the waters of rivers for conservation or irrigation.

101. There shall be an Inter-State Commission, with such powers of adjudication and administration as the Parliament deems necessary for the execution and maintenance, within the Commonwealth, of the provisions of this Constitution relating to trade and commerce, and of all laws made thereunder.

102. The Parliament may by any law with respect to trade or commerce forbid, as to railways, any preference or discrimination by any State, or by any authority constituted under a State, if such preference or discrimination is undue and unreasonable, or unjust to any State: due regard being had to the financial responsibilities incurred by any State in connexion with the construction and maintenance of its railways. But no preference or discrimination shall, within the meaning of this section, be taken to be undue and unreasonable, or unjust to any State, unless so adjudged by the Inter-State Commission.

103. The members of the Inter-State Commission—

(i) Shall be appointed by the Governor-General in Council:

(ii) Shall hold office for seven years, but may be removed within that time by the Governor-General in Council, on an address from both Houses of the Parliament in the same session praying for such removal on the ground of proved misbehaviour or incapacity:

(iii) Shall receive such remuneration as the Parliament may fix; but such remuneration shall not be diminished during their continuance in office.

104. Nothing in this Constitution shall render unlawful any rate for the carriage of goods upon a railway, the property of a State, if the rate is deemed by the Inter-State Commission to be necessary for the development of the territory of the State, and if the rate applies equally to goods within the State and to goods passing into the State from other States.

105. The Parliament may take over from the States their public debts [as existing at the establishment of the Commonwealth],\* or a proportion thereof according to the respective numbers of their people as shown by the latest statistics of the Commonwealth, and may convert, renew, or consolidate such debts, or any part thereof; and the State shall indemnify the Commonwealth in respect of the debts taken over, and thereafter the interest payable in respect of the debts shall be deducted and retained from the portions of the surplus revenue of the Commonwealth payable to the several States, or if such surplus is insufficient, or if there is no surplus, then the deficiency or the whole amount shall be paid by the several States.

105A.† (i) *The Commonwealth may make agreements with the States with respect to the public debts of the States, including—*

(a) *the taking over of such debts by the Commonwealth;*

(b) *the management of such debts;*

(c) *the payment of interest and the provision and management of sinking funds in respect of such debts;*

\* Under Section 2 of the Constitution Alteration (State Debts) 1909, the words in square brackets are omitted.

† Under Section 2 of the Constitution Alteration (State Debts) 1928, the Constitution was amended by the insertion of this section.

- (d) *the consolidation, renewal, conversion, and redemption of such debts ;*
- (e) *the indemnification of the Commonwealth by the States in respect of debts taken over by the Commonwealth ; and*
- (f) *the borrowing of money by the States or by the Commonwealth, or by the Commonwealth for the States.*
- (ii) *The Parliament may make laws for validating any such agreement made before the commencement of this section.*
- (iii) *The Parliament may make laws for the carrying out by the parties thereto of any such agreement.*
- (iv) *Any such agreement may be varied or rescinded by the parties thereto.*
- (v) *Every such agreement and any such variation thereof shall be binding upon the Commonwealth and the States parties thereto notwithstanding anything contained in this Constitution or the Constitution of the several States or in any law of the Parliament of the Commonwealth or of any State.*
- (vi) *The powers conferred by this section shall not be construed as being limited in any way by the provisions of section one hundred and five of this Constitution.*

#### CHAPTER V.—THE STATES.

106. The Constitution of each State of the Commonwealth shall, subject to this Constitution, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be, until altered in accordance with the Constitution of the State.

107. Every power of the Parliament of a Colony which has become or becomes a State, shall, unless it is by this Constitution exclusively vested in the Parliament of the Commonwealth or withdrawn from the Parliament of the State, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be.

108. Every law in force in a Colony which has become or becomes a State, and relating to any matter within the powers of the Parliament of the Commonwealth, shall, subject to this Constitution, continue in force in the State ; and, until provision is made in that behalf by the Parliament of the Commonwealth, the Parliament of the State shall have such powers of alteration and of repeal in respect of any such law as the Parliament of the Colony had until the Colony became a State.

109. When a law of a State is inconsistent with a law of the Commonwealth, the latter shall prevail, and the former shall, to the extent of the inconsistency, be invalid.

110. The provisions of this Constitution relating to the Governor of a State extend and apply to the Governor for the time being of the State, or other chief executive officer or administrator of the government of the State.

111. The Parliament of a State may surrender any part of the State to the Commonwealth ; and upon such surrender, and the acceptance thereof by the Commonwealth, such part of the State shall become subject to the exclusive jurisdiction of the Commonwealth.

112. After uniform duties of customs have been imposed, a State may levy on imports or exports, or on goods passing into or out of the State, such charges as may be necessary for executing the inspection laws of the State ; but the net produce of all charges so levied shall be for the use of the Commonwealth ; and any such inspection laws may be annulled by the Parliament of the Commonwealth.

113. All fermented, distilled, or other intoxicating liquids passing into any State or remaining therein for use, consumption, sale, or storage, shall be subject to the laws of the State as if such liquids had been produced in the State.

114. A State shall not, without the consent of the Parliament of the Commonwealth, raise or maintain any naval or military force, or impose any tax on property of any kind belonging to the Commonwealth, nor shall the Commonwealth impose any tax on property of any kind belonging to a State.



115. A State shall not coin money, nor make anything but gold and silver coin a legal tender in payment of debts.

116. The Commonwealth shall not make any law for establishing any religion, or for imposing any religious observance, or for prohibiting the free exercise of any religion, and no religious test shall be required as a qualification for any office or public trust under the Commonwealth.

117. A subject of the Queen, resident in any State, shall not be subject in any other State to any disability or discrimination which would not be equally applicable to him if he were a subject of the Queen resident in such other State.

118. Full faith and credit shall be given, throughout the Commonwealth, to the laws, the public Acts and records, and the judicial proceedings of every State.

119. The Commonwealth shall protect every State against invasion and, on the application of the Executive Government of the State, against domestic violence.

120. Every State shall make provision for the detention in its prisons of persons accused or convicted of offences against the laws of the Commonwealth, and for the punishment of persons convicted of such offences, and the Parliament of the Commonwealth may make laws to give effect to this provision.

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## CHAPTER VI.—NEW STATES.

121. The Parliament may admit to the Commonwealth or establish new States, and may upon such admission or establishment make or impose such terms and conditions, including the extent of representation in either House of the Parliament, as it thinks fit.

122. The Parliament may make laws for the government of any territory surrendered by any State to and accepted by the Commonwealth, or of any territory placed by the Queen under the authority of and accepted by the Commonwealth, or otherwise acquired by the Commonwealth, and may allow the representation of such territory in either House of the Parliament to the extent and on the terms which it thinks fit.

123. The Parliament of the Commonwealth may, with the consent of the Parliament of a State, and the approval of the majority of the electors of the State voting upon the question, increase, diminish, or otherwise alter the limits of the State, upon such terms and conditions as may be agreed on, and may, with the like consent, make provision respecting the effect and operation of any increase or diminution or alteration of territory in relation to any State affected.

124. A new State may be formed by separation of territory from a State, but only with the consent of the Parliament thereof, and a new State may be formed by the union of two or more States or parts of States, but only with the consent of the Parliaments of the States affected.

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## CHAPTER VII.—MISCELLANEOUS.

125. The seat of Government of the Commonwealth shall be determined by the Parliament, and shall be within territory which shall have been granted to or acquired by the Commonwealth, and shall be vested in and belong to the Commonwealth, and shall be in the State of New South Wales, and be distant not less than one hundred miles from Sydney.

Such territory shall contain an area of not less than one hundred square miles, and such portion thereof as shall consist of Crown lands shall be granted to the Commonwealth without any payment therefor.

The Parliament shall sit at Melbourne until it meet at the seat of Government.

126. The Queen may authorize the Governor-General to appoint any person, or any persons jointly or severally, to be his deputy or deputies within any part of the Commonwealth, and in that capacity to exercise during the pleasure of the Governor-General such powers and functions of the Governor-General as he thinks fit to assign to such deputy or deputies, subject to any limitations expressed or directions given by the Queen; but the appointment of such deputy or deputies shall not affect the exercise by the Governor-General himself of any power or function.

127. In reckoning the numbers of the people of the Commonwealth, or of a State or other part of the Commonwealth, aboriginal natives shall not be counted.

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## CHAPTER VIII.—ALTERATION OF THE CONSTITUTION.

128. This Constitution shall not be altered except in the following manner :—

The proposed law for the alteration thereof must be passed by an absolute majority of each House of the Parliament, and not less than two nor more than six months after its passage through both Houses the proposed law shall be submitted in each State to the electors qualified to vote for the election of members of the House of Representatives.

But if either House passes any such proposed law by an absolute majority, and the other House rejects or fails to pass it or passes it with any amendment to which the first-mentioned House will not agree, and if after an interval of three months the first-mentioned House in the same or the next session again passes the proposed law by an absolute majority with or without any amendment which has been made or agreed to by the other House, and such other House rejects or fails to pass it or passes it with any amendment to which the first-mentioned House will not agree, the Governor-General may submit the proposed law as last proposed by the first-mentioned House, and either with or without any amendments subsequently agreed to by both Houses, to the electors in each State qualified to vote for the election of the House of Representatives.

When a proposed law is submitted to the electors the vote shall be taken in such manner as the Parliament prescribes. But until the qualification of electors of members of the House of Representatives becomes uniform throughout the Commonwealth, only one-half the electors voting for and against the proposed law shall be counted in any State in which adult suffrage prevails.

And if in a majority of the States a majority of the electors voting approve the proposed law, and if a majority of all the electors voting also approve the proposed law, it shall be presented to the Governor-General for the Queen's assent.

No alteration diminishing the proportionate representation of any State in either House of the Parliament, or the minimum number of representatives of a State in the House of Representatives, or increasing, diminishing, or otherwise altering the limits of the State, or in any manner affecting the provisions of the Constitution in relation thereto, shall become law unless the majority of the electors voting in that State approve the proposed law.

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## SCHEDULE.

### OATH.

I, *A.B.*, do swear that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, Her heirs and successors according to law. So HELP ME GOD !

### AFFIRMATION.

I, *A.B.*, do solemnly and sincerely affirm and declare that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, Her heirs and successors according to law.

(NOTE.—*The name of the King or Queen of the United Kingdom of Great Britain and Ireland for the time being is to be substituted from time to time.*)

3. The Royal Proclamation.—The preceding Act received the Royal assent on the 9th July, 1900. This made it lawful to declare that the people of Australia should be united in a Federal Commonwealth. This proclamation, made on the 17th September, 1900, constituted the Commonwealth as from the 1st January, 1901 ; it reads as follows :—

BY THE QUEEN.

A PROCLAMATION.

(Signed) VICTORIA R.

WHEREAS by an Act of Parliament passed in the Sixty-third and Sixty-fourth Years of Our Reign, intituled "An Act to constitute the Commonwealth of *Australia*," it is enacted that it shall be lawful for the Queen, with the advice of the Privy Council, to declare by Proclamation, that, on and after a day therein appointed, not being later than One year after the passing of this Act, the people of *New South Wales*, *Victoria*, *South Australia*, *Queensland*, and *Tasmania*, and also, if Her Majesty is satisfied that the people of *Western Australia* have agreed thereto, of *Western Australia*, shall be united in a Federal Commonwealth under the name of the Commonwealth of Australia.

And whereas We are satisfied that the people of *Western Australia* have agreed thereto accordingly.

We therefore, by and with the advice of Our Privy Council, have thought fit to issue this Our Royal Proclamation, and We do hereby declare that on and after the First day of *January* One thousand nine hundred and one, the people of *New South Wales*, *Victoria*, *South Australia*, *Queensland*, *Tasmania*, and *Western Australia* shall be united in a Federal Commonwealth under the name of the Commonwealth of *Australia*.

Given at Our Court at *Balmoral* this Seventeenth day of *September*, in the Year of Our Lord One thousand nine hundred, and in the Sixty-fourth Year of Our Reign.

GOD SAVE THE QUEEN.



## CHAPTER II.

## PHYSIOGRAPHY.

## § 1. General Description of Australia.

1. *Geographical Position.*—(i) *General.* The Australian Commonwealth, which includes the island continent of Australia proper and the island of Tasmania, is situated in the Southern Hemisphere, and comprises in all an area of about 2,974,581 square miles, the mainland alone containing about 2,948,396 square miles. Bounded on the west and east by the Indian and Pacific Oceans respectively, it lies between longitudes  $113^{\circ} 9' E.$  and  $153^{\circ} 39' E.$ , while its northern and southern limits are the parallels of latitude  $10^{\circ} 41' S.$  and  $39^{\circ} S' S.$ , or, including Tasmania,  $43^{\circ} 39' S.$  On its north are the Timor and Arafura Seas and Torres Strait—on its south the Southern Ocean and Bass Strait. The extreme points are “Steep Point” on the west, “Cape Byron” on the east, “Cape York” on the north, “Wilson’s Promontory” on the south, or, if Tasmania be included, “South-East Cape.”

(ii) *Tropical and Temperate Regions.* Of the total area of Australia nearly 40 per cent. lies within the tropics. Assuming, as is usual, that the latitude of the Tropic of Capricorn is  $23^{\circ} 30' S.$  (its mean value for 1912 was  $23^{\circ} 26' 48.5''$ ), the areas within the tropical and temperate zones are approximately as follows:—

## AUSTRALIA : AREAS OF TROPICAL AND TEMPERATE REGIONS.

(AREAS OF STATES AND TERRITORY PARTIALLY WITHIN TROPICS.)

Area.		Queen-land.	Western Australia.	Northern Territory.	Total.
Within Tropical Zone	sq. miles	359,000	364,000	426,320	1,149,320
” Temperate Zone	” ”	311,500	611,920	97,300	1,020,720
Ratio of Tropical part to whole State . .		0.535	0.373	0.814	0.530
” Temperate part to whole State		0.465	0.627	0.186	0.470

Thus the tropical part is roughly about one-half (0.530) of the three territories mentioned above, or about five-thirteenths of the whole of Australia (0.386).

2. *Area of Australia compared with Areas of other Countries.*—The area of Australia is almost as great as that of the United States of America, four-fifths of that of Canada, more than one-fifth of the area of the British Empire, nearly three-fourths of the whole area of Europe, and about 25 times as large

as Great Britain and Ireland. This great area, coupled with a limited population, renders the solution of the problem of Australian development a particularly difficult one. The areas of Australia and of certain other countries are given in the following table:—

AREA OF AUSTRALIA AND OF OTHER COUNTRIES, *Circa 1939.*

Country.	Area.	Country.	Area.
	Sq. miles.		Sq. miles.
<b>Continental Divisions—</b>		<b>AFRICA—continued.</b>	
Europe .. ..	4,409,000	Italian East Africa ..	666,000
Asia .. ..	16,216,000	Angola .. ..	488,000
Africa .. ..	11,710,000	Union of South Africa ..	472,000
North and Central America		Egypt .. ..	386,000
and West Indies ..	8,665,000	Tanganyika Territory ..	374,000
South America .. ..	6,934,000	Nigeria and Protectorate..	373,000
Oceania, etc. .. ..	3,301,000	South-West Africa ..	322,000
Total, excluding Arctic		Mozambique .. ..	298,000
and Antarctic Conts.	51,235,000	Northern Rhodesia ..	290,000
		Bechuanaland Protectorate	275,000
<b>Europe—</b>		Madagascar .. ..	229,000
U.S.S.R. (Russia) ..	2,316,000	Kenya Colony and Protec-	
Germany (a) .. ..	225,000	torate .. ..	225,000
France .. ..	213,000	Other .. ..	1,126,000
Spain (inc. possessions) ..	194,000	Total .. ..	11,710,000
Sweden .. ..	173,000		
Poland .. ..	150,000	<b>North and Central America—</b>	
Finland .. ..	148,000	Canada .. ..	3,695,000
Italy (b) .. ..	131,000	United States of America..	3,027,000
Norway .. ..	125,000	Mexico .. ..	760,000
Rumania .. ..	114,000	Alaska .. ..	586,000
Yugoslavia .. ..	96,000	Newfoundland and Labra-	
United Kingdom ..	94,000	dor .. ..	103,000
Other .. ..	430,000	Honduras .. ..	50,000
Total .. ..	4,409,000	Nicaragua .. ..	40,000
		Other .. ..	326,000
<b>Asia—</b>		Total .. ..	8,005,000
U.S.S.R. (Russia) ..	5,860,000		
China and Dependencies..	4,287,000	<b>South America—</b>	
British India .. ..	863,000	Brazil .. ..	3,286,000
Arabia .. ..	1,004,000	Argentine Republic ..	1,078,000
Feudatory Indian States..	712,000	Bolivia .. ..	421,000
Iran .. ..	634,000	Peru .. ..	482,000
Netherlands Indies (c) ..	735,000	Colombia (exc. of Panama)	449,000
Turkey .. ..	287,000	Venezuela .. ..	354,000
French Indo-China ..	286,000	Chile .. ..	287,000
Japan and Dependencies..	262,000	Paraguay .. ..	151,000
Afghanistan .. ..	251,000	Ecuador .. ..	176,000
Burma .. ..	234,000	Other .. ..	201,000
Thailand .. ..	200,000	Total .. ..	6,934,000
Other .. ..	601,000		
Total .. ..	16,216,000	<b>Oceania, etc.—</b>	
		Commonwealth of Australia	2,975,000
<b>Africa—</b>		New Zealand and Depen-	
French West Africa ..	1,816,000	dencies .. ..	104,000
Anglo-Egyptian Sudan ..	969,000	Territory of New Guinea..	93,000
French Equatorial Africa..	960,000	Papua .. ..	91,000
Belgian Congo .. ..	910,000	Other .. ..	38,000
Algeria .. ..	851,000	Total .. ..	3,301,000
Libya .. ..	680,000	<b>British Empire</b> .. ..	13,354,000

(a) Includes Austria and part of Czechoslovakia.  
New Guinea.

(b) Includes Albania.

(c) Includes Dutch

The countries and areas given in the table are those obtaining before the 1939 War and have been extracted from the *Statistical Year Book of the League of Nations* or the *Statesman's Year Book*.

3. Areas of Political Subdivisions.—As already stated. Australia consists of six States and the Northern and Australian Capital Territories. The areas of these, and their proportions of the total of Australia, are shown in the following table:—

AUSTRALIA : AREA OF STATES AND TERRITORIES.

State or Territory.	Area.	Percentage on Total.
	Sq. miles.	%
New South Wales .. ..	309,433	10.40
Victoria .. ..	87,884	2.96
Queensland .. ..	670,500	22.54
South Australia .. ..	380,070	12.78
Western Australia .. ..	975,920	32.81
Tasmania .. ..	26,215	0.88
Northern Territory .. ..	523,620	17.60
Australian Capital Territory ..	939	0.03
Total .. ..	2,974,581	100.00

4. Coastal Configuration.—(i) *General*. There are no striking features in the configuration of the coast; the most remarkable indentations are the Gulf of Carpentaria on the north, and the Great Australian Bight on the south. The Cape York Peninsula on the extreme north is the only other remarkable feature in the outline. In Official Year Book No. 1, an enumeration is given of the features of the coast-line of Australia (see pp. 60-68).

(ii) *Coast-line*. The lengths of coast-line, excluding minor indentations, of each State and of the whole continent, and the area per mile of coast-line, are shown in the following table:—

AUSTRALIA : COAST-LINE AND AREA PER MILE THEREOF.

State.	Coast-line.	Area per Mile of Coast-line.	State.	Coast-line.	Area per Mile of Coast-line.
	Miles.	Sq. miles.		Miles.	Sq. miles.
New South Wales(a)	700	443	South Australia ..	1,540	247
Victoria ..	680	129	Western Australia	4,350	224
Queensland ..	3,000	223	Continent (b) ..	11,310	261
Northern Territory	1,040	503	Tasmania ..	900	29

(a) Includes Australian Capital Territory.

(b) Area 2,948,366 square miles.

For the entire Commonwealth of Australia this gives a coast-line of 12,210 miles and an average of 244 square miles for one mile of coast-line. According to Strelbitski, Europe has only 75 square miles of area to each mile of coast-line, and, according to recent figures, England and Wales have only one-third of this, namely, 25 square miles.



(iii) *Historical Significance of Coastal Names.* It is interesting to trace the voyages of some of the early navigators by the names bestowed by them on various coastal features—thus Dutch names are found on various points of the Western Australian coast, in Nuyts' Archipelago, in the Northern Territory, and in the Gulf of Carpentaria; Captain Cook can be followed along the coasts of New South Wales and Queensland; Flinders' track is easily recognized from Sydney southwards, as far as Cape Catastrophe, by the numerous Lincolnshire names bestowed by him; and the French navigators of the end of the eighteenth and the beginning of the nineteenth century have left their names all along the Western Australian, South Australian and Tasmanian coasts.

5. *Geographical Features of Australia.*—In each of the earlier issues of the Official Year Book fairly complete information has been given concerning some special geographical element. The nature of this information and its position in the various issues can be readily ascertained on reference to the special index following the index to maps and graphs at the end of this issue.

6. *Fauna, Flora, Geology and Seismology of Australia.*—Special articles dealing with these features have appeared in previous issues of the Official Year Book, but limits of space naturally preclude their repetition in each volume. As pointed out in par. 5, however, the nature and position of these articles can be readily ascertained from the special index.

## § 2. Climate and Meteorology of Australia.\*

1. *Introductory.*—In Official Year Book No. 3, pp. 79 and 80, some account is given of the history of Australian meteorology, including a reference to the development of magnetic observations. In Official Year Book No. 4, pp. 84 and 87, will be found a short sketch of the creation and organization of the Commonwealth Bureau of Meteorology, and a résumé of the subjects dealt with at the Meteorological Conference in 1907.

2. *Meteorological Publications.*—Reference to publications issued by the Central Meteorological Bureau appears in Official Year Books Nos. 22, pp. 40 and 41, and 34, p. 11.

3. *Equipment.*—The determination of the climatological data has been made by records of the following instruments:—

- (i) *Rainfall.* Rainfall has been measured by a cylindrical gauge generally 3 inches in diameter.
- (ii) *Temperature.* Extreme daily temperatures have been recorded by means of self-registering maximum and minimum thermometers which are read and set daily.
- (iii) *Humidity.* Humidities have been determined by the aid of tables from readings of dry and wet bulb thermometers.
- (iv) *Atmospheric Pressure.* Pressures have been measured by mercurial barometers of the Kew (or Fortin) pattern.
- (v) *Evaporation.* The standard evaporimeter in use consists of a cylindrical galvanized iron tank 3 feet in diameter with a water jacket. Concrete tanks of similar form and dimensions are also used.
- (vi) *Wind.* Data concerning wind have been obtained either by "Robinson" cup anemometer, "Dines" pressure tube anemometer or by "Machin" cup anemometer.

4. *General Description of Australia.*—A considerable portion (0.530) of three divisions of Australia is north of the tropic of Capricorn—that is to say, within Queensland, Western Australia and the Northern Territory, no less than 1,149,320 square miles

\* Prepared from data supplied by the Director, Commonwealth Meteorological Bureau.

belong to the tropical zone and 1,020,720 to the temperate zone. The whole area of Australia within the temperate zone, however, is 1,825,261 square miles; thus the tropical part is about 0.386, or about five-thirteenthths of the whole, or the "temperate" region is half as large again as the "tropical" (more accurately 1.588). By reason of its insular geographical position and the absence of striking physical features whether in marine gulfs or in important mountains, Australia is, on the whole, less subject to extremes of weather than are regions of similar area in other parts of the globe, and latitude for latitude Australia is, on the whole, more temperate.

The average elevation of the surface of the land is low, probably close to 900 feet above the sea. The altitudes range up to a little over 7,300 feet, hence its climate embraces a great many features, from the characteristically tropical to what is essentially alpine, a fact indicated in some measure by the name Australian Alps given to the southern portion of the Great Dividing Range.

On the coast, the rainfall is often abundant and the atmosphere moist, but in some portions of the interior is very limited, and the atmosphere dry. The distribution of forest, therefore, with its climatic influence, is very uneven. In the interior, in places, there are fine belts of trees, but there are large areas also which are treeless, and here the air is hot and parching in summer. Again, on the coast, even so far south as latitude 35°, the vegetation is tropical in its luxuriance, and to some extent also in character. Climatologically, therefore, Australia may be said to present a great variety of features.

5. *Meteorological Divisions.*—(i) *General.* Reference to the divisions adopted by the Commonwealth Meteorologist will be found in Official Year Book No. 22, p. 41.

(ii) *Special Climatological Stations.* The latitudes, longitudes and altitudes of special stations, the climatological features of which are graphically represented hereinafter, are as follows:—

#### SPECIAL CLIMATOLOGICAL STATIONS: AUSTRALIA.

Locality.	Height above Sea Level.	Latitude. S.	Longitude. E.	Locality.	Height above Sea Level.	Latitude. S.	Longitude. E.
	Feet.	deg. min.	deg. min.		Feet.	deg. min.	deg. min.
Perth ..	197	31 57	115 5	Canberra ..	1,000	35 20	149 15
Adelaide ..	140	34 50	138 35	Darwin ..	97	12 25	130 51
Brisbane ..	13	27 28	153	Alice Springs	1,901	23 38	133 37
Sydney ..	138	33 52	151 12	Dubbo ..	870	32 18	148 35
Melbourne ..	114	37 49	144 58	Laverion, W.A.	1,530	28 40	122 23
Hobart ..	177	42 53	147 20	Coolgardie ..	1,389	30 57	121 10

6. *Temperatures.*—(i) *Comparisons with other Countries.* In respect of Australian temperatures generally, it may be pointed out that the mean annual isotherm for 70° Fahrenheit extends in South America and South Africa as far south as latitude 33°, while in Australia it reaches only as far south as latitude 30°, thus showing that, on the whole, Australia has, latitude for latitude, a more temperate climate than other places in the Southern Hemisphere.

The comparison is even more favourable when the Northern Hemisphere is included, for in the United States of America the 70° isotherm extends in several of the western States as far north as latitude 41°. In Europe, the same isotherm reaches almost to the southern shores of Spain, passing afterwards, however, along the northern shores of Africa till it reaches the Red Sea, when it bends northward along the eastern shore of the Mediterranean till it reaches Syria. In Asia, nearly the whole of the land area south of latitude 40° N. has a higher temperature than 70°.

The extreme range of temperature is less than  $100^{\circ}$  over practically the whole of Australia, that figure being only slightly exceeded at a very few places; it is mostly  $70^{\circ}$  to  $90^{\circ}$  over inland areas, and somewhat less on the coast. In parts of Asia and North America, the extreme range exceeds  $130^{\circ}$  and  $150^{\circ}$  in some localities.

Along the northern shores of Australia the temperatures are very equable. At Darwin, for example, the difference in the means for the hottest and coldest months is only  $8.4^{\circ}$ , and the extreme readings for the year, or the highest maximum on record and the lowest minimum, show a difference of under  $50^{\circ}$ .

(ii) *Hottest and Coldest Parts.* A comparison of the temperatures recorded at coast and inland stations shows that, in Australia, as in other continents, the range increases with increasing distance from the coast.

In the interior of Australia, and during exceptionally dry summers, the temperature occasionally reaches or exceeds  $120^{\circ}$  in the shade, and during the dry winters the major portion of the country to the south of the tropics is subject to ground frosts. The hottest area of the continent is situated in the northern part of Western Australia about the Marble Bar and Nullagine gold-fields, where the maximum shade temperature during the summer sometimes exceeds  $100^{\circ}$  continuously for days and weeks. The coldest part of Australia is the extreme south-east of New South Wales and extreme east of Victoria—the region of the Australian Alps. Here the temperature seldom, if ever, reaches  $100^{\circ}$  even in the hottest of seasons, while in winter, readings slightly below zero are occasionally recorded.

Tasmania as a whole enjoys a most moderate and equable range of temperature throughout the year, although occasionally hot winds may cause the temperature to rise to  $100^{\circ}$  in the eastern part of the State.

(iii) *Monthly Maximum and Minimum Temperatures.* The normal monthly maximum and minimum temperatures can be best shown by means of graphs, which exhibit the nature of the fluctuation of each for all available years. In the diagram herein for nine representative places in Australia, the upper heavy curves show the mean maximum, and the lower heavy curves the mean minimum temperatures based upon daily observations, while the length of the interval between these two heavy curves shows the average difference between the highest and the lowest temperatures of the twenty-four hours.

7. *Humidity.*—After temperature, humidity is the most important element of climate particularly as regards its effects on human comfort, rainfall supply, and conservation and related problems.

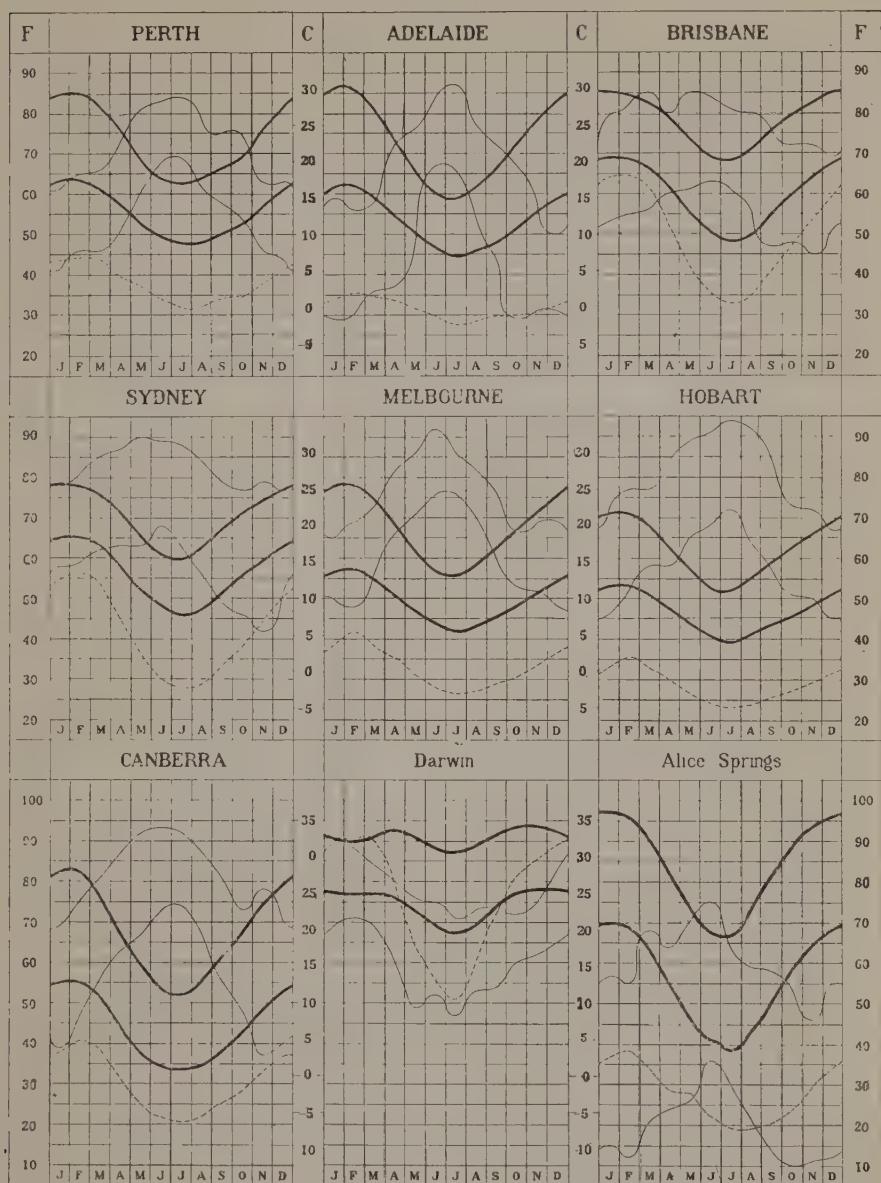
In this publication the humidity of the air has been graphically represented by its vapour pressure (i.e., the partial pressure of the water vapour measured in inches of mercury). The humidity has also been expressed by the relative humidity which is the quotient of the vapour pressure divided by the saturation vapour pressure and multiplied by one hundred. The mean 9 a.m. relative humidity, as well as its highest and lowest recorded mean values at 9 a.m., have been given in the tables of climatological data for the capital cities included herein. The mean monthly vapour pressure has also been added to these tables.

The annual curve of vapour pressure derived from the normal monthly values for this element is comparable with the maximum and minimum temperature curves, but the relative humidities consisting as they do of the extremes for each month do not show the normal annual fluctuation which would be approximately midway between the extremes.

The order of stations in descending values of 9 a.m. vapour pressure is Darwin, Brisbane, Sydney, Perth, Melbourne, Adelaide, Canberra, Hobart and Alice Springs, while the relative humidity diminishes in the order, Sydney, Canberra, Melbourne, Darwin, Hobart, Brisbane, Perth, Adelaide and Alice Springs.



AVERAGE ANNUAL FLUCTUATIONS OF NORMAL MAXIMUM ANE MINIMUM  
TEMPERATURE AND HUMIDITY.



**EXPLANATION.**—The upper and lower heavy lines in each graph represent the mean maximum and mean minimum temperatures respectively. The Fahrenheit temperature scales are shown on the outer edge of the sheet under "F" and the centigrade scales in the two inner columns under "C."

The broken line shows the normal absolute humidity in the form of 9 a.m. vapour pressures for which the figures in the outer "F" columns represent hundredths of an inch of barometric pressure.

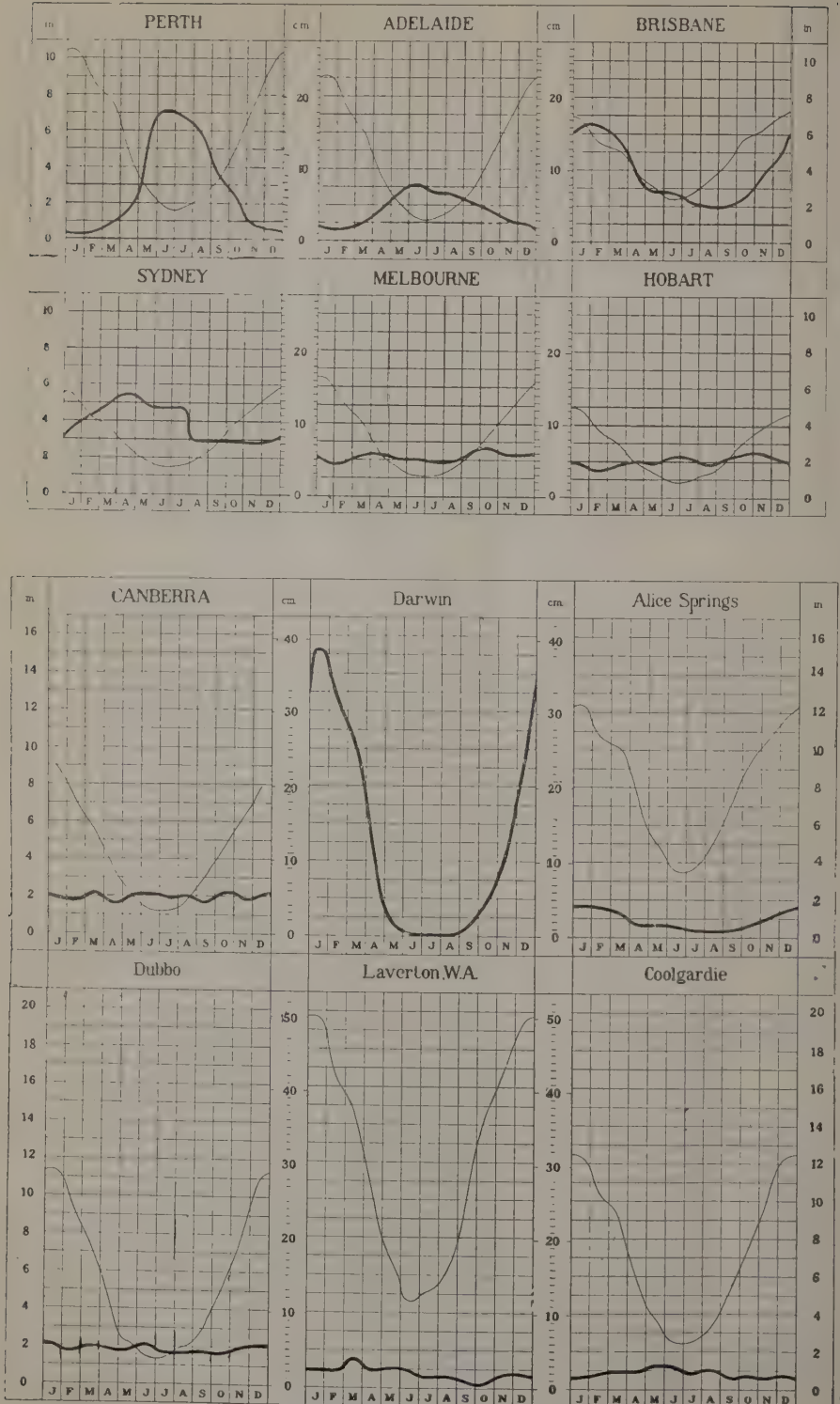
The upper and lower fine lines join the greatest and the least monthly means of relative humidity respectively, the figures under the outer columns "F" indicating percentage values.

The curves for temperature and vapour pressure joining the mean monthly values serve to show the annual fluctuation of these elements, but the relative humidity graphs joining the extreme values for each month do not indicate any normal annual variation.

Comparison of the maximum and minimum temperature curves affords a measure of the mean diurnal range of temperature. At Perth in the middle of January, for instance, there is normally a range of  $21^{\circ}$  from  $63^{\circ}$  F. to  $84^{\circ}$  F., but in July it is only  $15^{\circ}$  from  $45^{\circ}$  F. to  $63^{\circ}$  F.

The relative humidity curves illustrate the extreme range of the mean monthly humidity over a number of years.

## MEAN MONTHLY RAINFALL AND EVAPORATION.



EXPLANATION.—On the preceding graphs thick lines denote rainfall, and thin lines evaporation, and show the fluctuation of the mean rate of fall or evaporation *per month* throughout the year. The results, plotted from the Climatological Tables herein, are shown in inches (see the outer columns), and the corresponding metric scale (centimetres) is shown in the two inner columns. The evaporation is not given for Darwin.

At Perth, Adelaide, Brisbane, Melbourne, Hobart, Canberra, Alice Springs, and Coolgardie the results have been obtained from jacketed tanks sunk in the ground. At Sydney and Dubbo sunken tanks without water jackets are used, whilst at Laverton (W.A.) the records are taken from a small portable jacket evaporation dish of 8 inches in diameter.

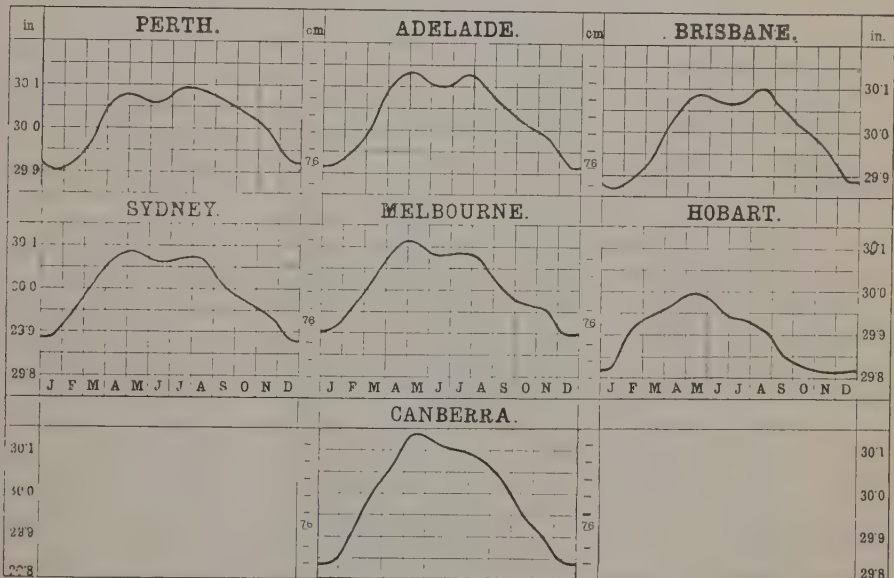
The distance for any date from the zero line to the curve represents the average number of inches, reckoned as per month, of rainfall at that date. Thus, taking the curve for Adelaide in the middle of January, the rain falls on the average at the rate of about three-fourths of an inch per month or, say, at the rate of about 9 inches per year. In the middle of June it falls at the rate of a little over 3 inches per month, or, say, at the rate of about 37 inches per year. At Dubbo, the evaporation is at the rate of nearly 11½ inches per month about the middle of January, and only about 1½ inches at the middle of June.

The mean annual rainfall and evaporation at the places indicated are given in the appended table.

MEAN ANNUAL RAINFALL AND EVAPORATION.

Place.	Rainfall.	Evapora- tion.	Place.	Rainfall.	Evapora- tion.
	In.	In.		In.	In.
Perth ..	34.75	65.91	Canberra ..	23.05	54.00
Adelaide ..	21.18	56.04	Darwin ..	60.60	—
Brisbane ..	44.71	56.36	Alice Springs ..	10.55	97.21
Sydney ..	46.59	40.17	Dubbo ..	21.93	66.37
Melbourne ..	25.69	39.15	Laverton, W.A.	9.12	145.17
Hobart ..	23.96	31.21	Coolgardie ..	10.24	84.42

MEAN BAROMETRIC PRESSURE.—CAPITAL CITIES.



EXPLANATION.—The lines representing the yearly fluctuations of barometric pressure at the State capital cities are means for long periods, and are plotted from the Climatological Tables herein. The pressures are shown in inches on about 2½ times the natural scale, and the corresponding pressures in centimetres are also shown in the two inner columns, in which each division represents one millimetre.

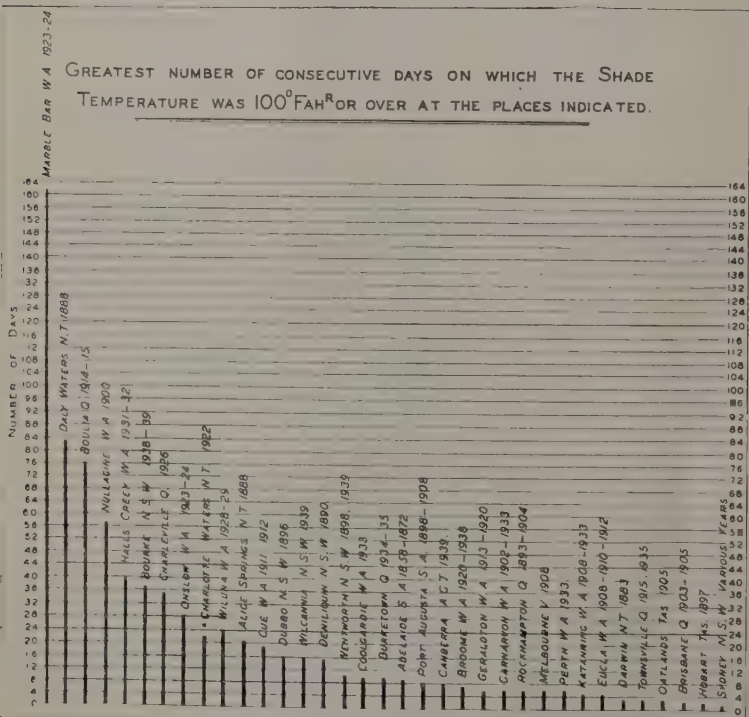
Taking the Brisbane graph for purposes of illustration, it will be seen that the mean pressure in the middle of January is about 29.87 inches, and there are maxima in the middle of May and August of about 30.09 inches.

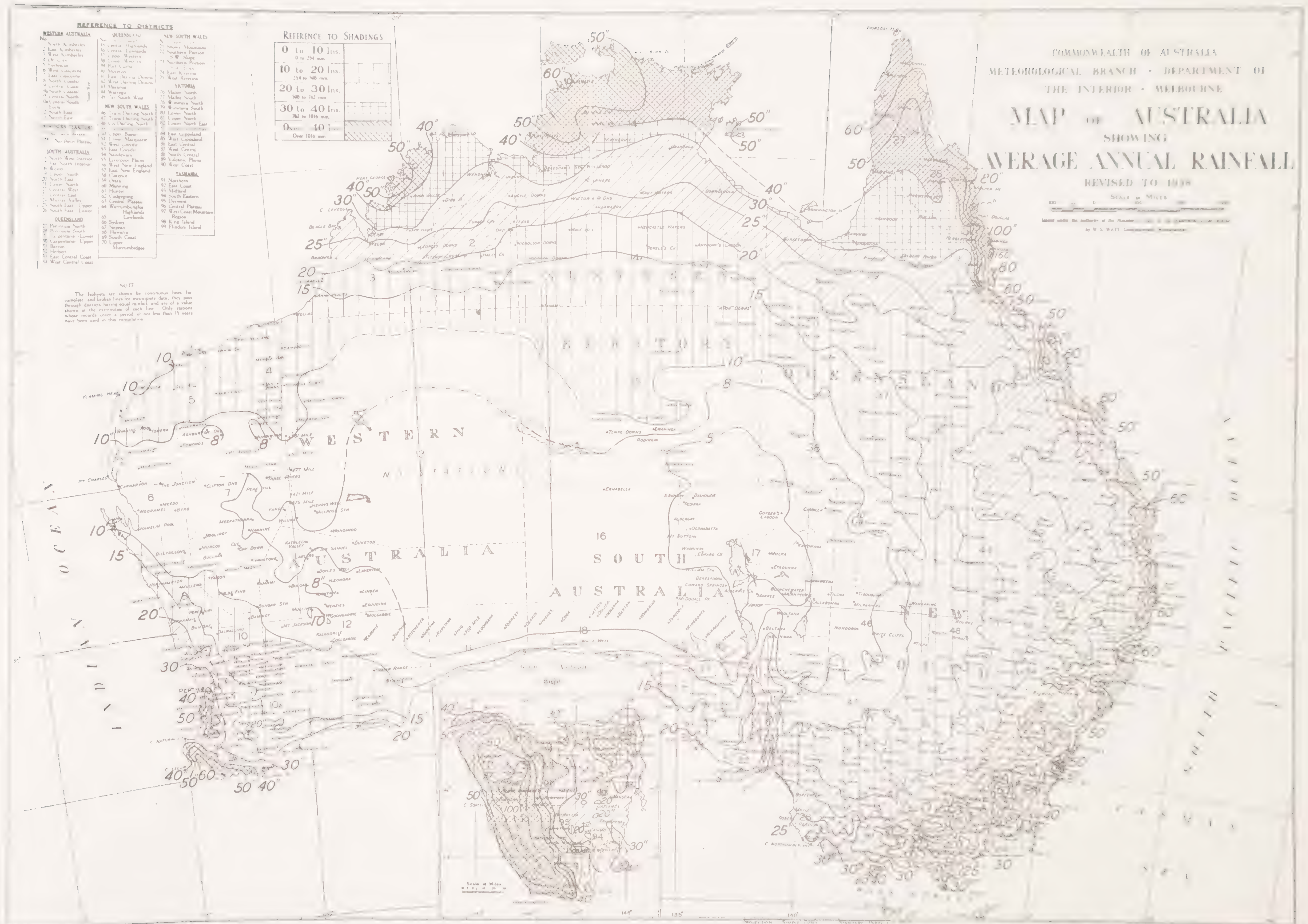


AREA AFFECTED AND PERIOD OF DURATION OF THE LONGEST HEAT WAVES WHEN THE MAXIMUM TEMPERATURE FOR CONSECUTIVE 24 HOURS REACHED OR EXCEEDED 100°F.



DECEMBER, 1942.







COMMONWEALTH OF AUSTRALIA.  
BUREAU OF METEOROLOGY MELBOURNE.  
MONTHLY DISTRIBUTION OF RAINFALL  
OVER AUSTRALIA.

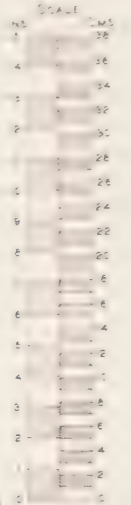
REVISED TO END OF 1939.

Authority of the MINISTER OF STATE FOR THE AIR BY  
H. N. WARREN  
DIRECTOR

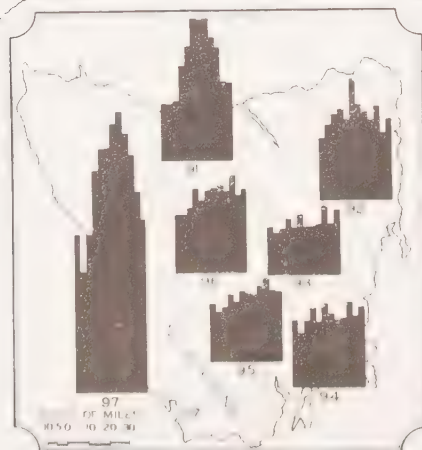
EXPLANATION: THE GRAPHS SHOW THE AVERAGE  
RAINFALL IN EACH MONTH OF THE YEAR IN THE  
VARIOUS RAINFALL DISTRICTS. THE BOUNDARIES  
OF WHICH ARE SHOWN BY THE BROKEN LINES ON  
THE MAP. THE NUMBERS ON THE MAP REFER TO  
THE DISTRICTS. THE CORRESPONDING DISTRICT  
NAMES ARE GIVEN IN THE INSERT ON PAGE 21.

THE COLUMNS FOR THE SUCCESSIVE MONTHS  
JANUARY TO DECEMBER, RUN FROM LEFT TO  
RIGHT.

THE LENGTH OF A VERTICAL COLUMN REPRESENTS  
THE AVERAGE MONTHLY RAINFALL ACCORDING  
TO THE SCALE GIVEN BELOW.



NO STATIONS



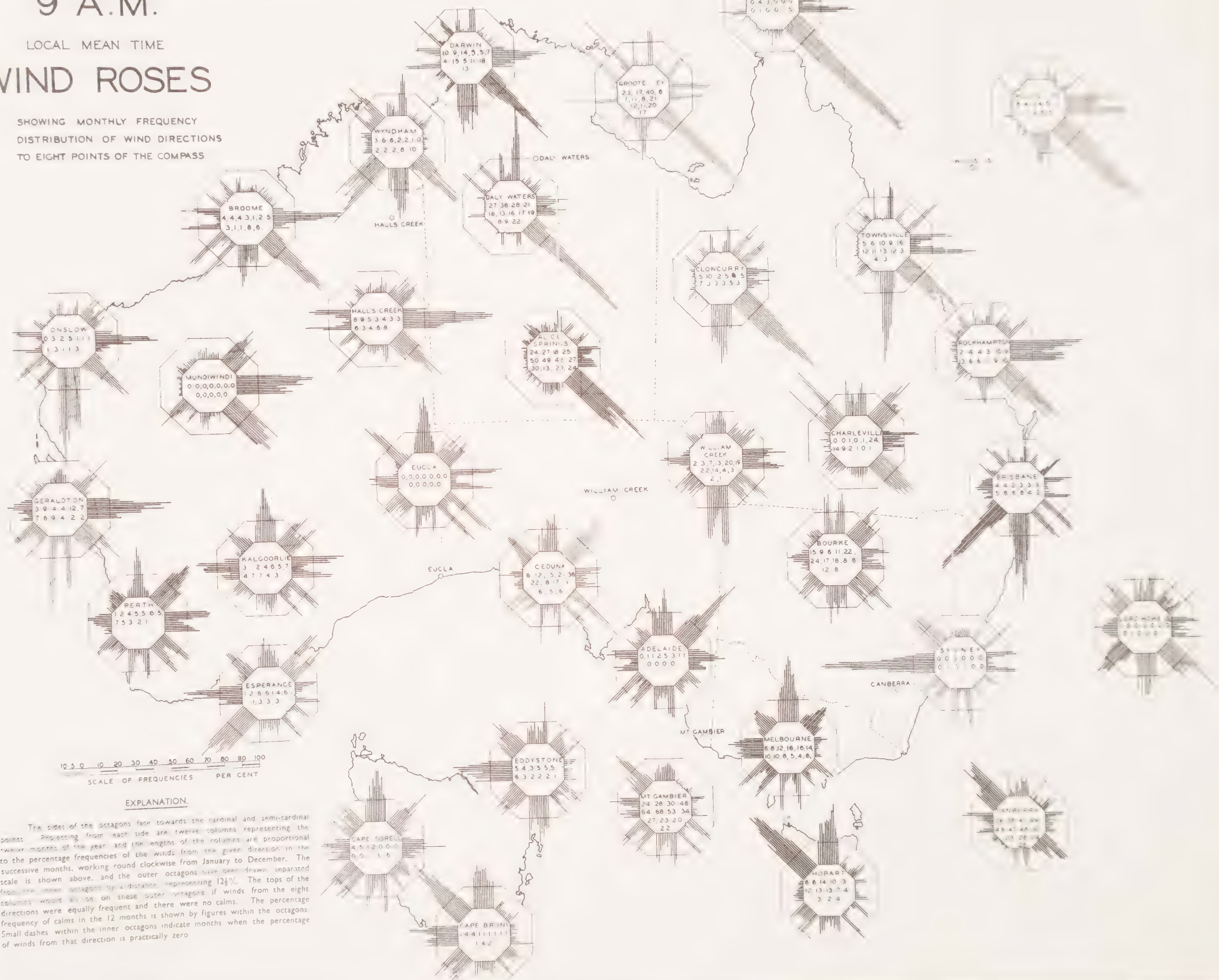


9 A.M.

LOCAL MEAN TIME

# WIND ROSES

SHOWING MONTHLY FREQUENCY  
DISTRIBUTION OF WIND DIRECTIONS  
TO EIGHT POINTS OF THE COMPASS





LOCAL MEAN TIME

SHOWING MONTHLY FREQUENCY  
DISTRIBUTION OF WIND DIRECTIONS  
TO EIGHT POINTS OF THE COMPASS



EXPLANATION.

The sides of the octagons face towards the cardinal and semi-cardinal points. Projecting from each side are twelve columns representing the twelve months of the year, and the lengths of the columns are proportional to the percentage frequencies of the winds from the given direction in the successive months, working round clockwise from January to December. The scale is shown above, and the outer octagons have been drawn, separated from the inner octagons by a distance representing  $2\frac{1}{2}''$ . The tops of the columns would all be on these outer octagons if winds from the eight directions were equally frequent and there were no calms. The percentage frequency of calms in the 12 months is shown by figures within the octagons. Small dashes within the inner octagons indicate months when the percentage of winds from that direction is practically zero.

8. *Evaporation.*—(i) *General.* The rate and quantity of evaporation in any territory is influenced by the prevailing temperature, and by atmospheric humidity, pressure and movement. In Australia, the question is, perhaps, of more than ordinary importance, since in its drier regions water has often to be conserved in "tanks"\* and dams. The magnitude of the economic loss by evaporation will be appreciated from the tabular records herein, which show that the yearly amount varies from about 31 inches at Hobart to more than 100 inches in the central parts of Australia. Over the inland districts of the continent it has been calculated that evaporation equals the rainfall where the annual totals are about 36 inches, the variations above and below this quantity being inverse.

(ii) *Monthly Evaporation Curves.* The diagrams herein showing the mean monthly evaporation in various parts of Australia disclose how characteristically different are the amounts for the several months in different localities.

(iii) *Loss by Evaporation.* In the interior of Australia the possible evaporation is greater than the actual rainfall. Since the loss by evaporation depends largely on the exposed area, tanks and dams so designed that the surface shall be a minimum are advantageous. Further, the more protected from the direct rays of the sun and from winds by means of suitable tree planting, the less will be the loss by evaporation. These matters are naturally of more than ordinary concern in the drier districts of Australia.

9. *Rainfall.*—(i) *General.* The rainfall of any region is determined mainly by the direction and route of the prevailing winds, by the varying temperatures of the earth's surface over which they blow, and by its geographical features.

Australia lies within the zones of the south-east trades and prevailing westerly winds. The southern limit of the south-east trade strikes the eastern shores at about 30° south latitude, and, with very few exceptions, the heaviest rains of the Australian continent are precipitated along the Pacific slopes to the north of that latitude, the varying quantities being more or less regulated by the differences in elevation of the shores and of the chain of mountains from the New South Wales northern border to Thursday Island, upon which the rain-laden winds blow. The converse effect is exemplified on the north-west coast of Western Australia, where the prevailing winds blowing from the interior of the continent instead of from the ocean, result in the lightest coastal rain in Australia.

The westerly winds, which skirt the southern shores, are responsible for the reliable, generally light to moderate rains enjoyed by the south-western portion of Western Australia, the agricultural areas of South Australia, a great part of Victoria, and the whole of Tasmania.

(ii) *Distribution of Rainfall.* The average annual rainfall map of Australia herein shows that the heaviest yearly falls occur on the north coast of Queensland (up to over 160 inches) and in Western Tasmania (up to 140 inches), while from 50 to over 60 inches are received on parts of the eastern seaboard from Jervis Bay (New South Wales) to the northern part of Cape York Peninsula, also around Darwin (Northern Territory), on the West Kimberley coast, near Cape Leeuwin (Western Australia), about the Australian Alps in eastern Victoria and New South Wales, and on the north-eastern highlands in Tasmania. A great part of the interior of the continent, stretching from the far west of New South Wales and the south-west of Queensland to the vicinity of Shark Bay in Western Australia, has a very low average rainfall of less than 10 inches a year. Between these two regions of heavy and very low rainfall are the extensive areas which experience useful to good rains, and in the southern and eastern parts of which are found the best country and most of the population and primary production.

\* In Australia, artificial storage ponds or reservoirs are called "tanks."



(iii) *Factors Determining Occurrence, Intensity and Seasonal Distribution of Rainfall.* Reference has already been made to the frequent rains occurring in the north-eastern coastal districts of Queensland with the prevailing south-east trade winds and to similar rains in the west of Tasmania with the prevailing westerly winds. Other rains in Australia are associated mainly with tropical and southern depressions.

The former chiefly affect the northern, eastern, and to some extent the central parts of the continent and operate in an irregular manner during the warmer half of the year, but principally from December to March. They vary considerably in activity and scope from year to year, occasionally developing into severe storms off the east and north-west coasts. Tropical rainstorms sometimes cover an extensive area, half of the continent on occasions receiving moderate to very heavy falls during a period of a few days. Rain is also experienced, with some regularity, with thunderstorms in tropical areas, specially near the coast. All these tropical rains, however, favour mostly the northern and eastern parts of the area referred to; the other parts further inland receive lighter, less frequent and less reliable rainfall. With the exception of districts near the east coast, where some rain falls in all seasons, the tropical parts of the continent receive useful rains only on rare occasions from May to September.

The southern depressions are most active in the winter—June to August—and early spring months. The rains associated with them are fairly reliable and frequent over Southern Australia and Tasmania, and provide during that period the principal factor in the successful growing of wheat. These depressions also operate with varying activity during the remainder of the year, but the accompanying rains are usually lighter. The southern rains favour chiefly the south-west of Western Australia, the agricultural districts of South Australia, Victoria, Tasmania, and the southern parts of New South Wales. They sometimes extend into the drier regions of the interior, but only infrequently and with irregular rains.

The map showing mean monthly distribution of rainfall over Australia gives information on the amount and occurrence of rain in graphic form.

(iv) *Wettest and Driest Regions.* The wettest known part of Australia is on the north-east coast of Queensland, between Port Douglas and Cardwell, where Deeral on the north coast-line has an average annual rainfall of 183.53 inches and Tully on the Tully River 180.71 inches. In addition, three stations situated on, or adjacent to, the Johnstone and Russell Rivers have an average annual rainfall of between 144 and 169 inches. The maximum and minimum falls there are:—Deeral, 257.58 in 1939 and 143.72 inches in 1937, or a range of 113.86 inches; Tully, 234.37 in 1936 and 133.23 inches in 1938, or a range of 101.14 inches; Goondi, 241.53 in 1894 and 67.88 inches in 1915, or a range of 173.65 inches; Innisfail, 211.24 in 1894 and 69.87 inches in 1902, or a range of 141.37 inches; Harvey Creek, 254.77 in 1921 and 80.47 inches in 1902, or a range of 174.30 inches.

On four occasions more than 200 inches have been recorded at Goondi, the last of these being in 1910, when 204.82 inches were registered. The records at this station cover a period of 56 years.

In fifteen years of record Tully has exceeded 200 inches on seven occasions, whilst in a record of 28 complete years Harvey's Creek has four times exceeded this figure. At Tully 234.37 inches were recorded during 1936 and at Harvey Creek the total for 1921 was 254.77 inches. At the South Johnstone Sugar Experiment Station 202.52 inches were recorded in 1921.

In Tasmania the wettest part is in the West Coast region, the average annual rainfall at Lake Margaret being 144 inches, with a maximum of 175.12 inches in 1924.

The driest known part of the continent is in the Lake Eyre district in South Australia (the only part of the continent below sea level), where the annual average is only 5 inches, and where the fall rarely exceeds 10 inches for the twelve months.

The inland districts of Western Australia were at one time regarded as the driest part of Australia, but authentic observations in recent years over most settled districts in the east of that State show that the annual average is about 10 inches.

(v) *Quantities and Distribution of Rainfall.* The general distribution is best seen from the rainfall map herein, which shows the areas subject to average annual rainfalls lying between certain limits. The proportions of the total area of each State and of Australia as a whole enjoying varying quantities of rainfall determined from the latest available information are shown in the following table:—

AVERAGE ANNUAL RAINFALL DISTRIBUTION.

Average Annual Rainfall.	N.S.W. (a)	Victoria.	Queens- land.	South Au- stralia	Western Australia.	Tas- mania. (b)	Northern Territory	Total. (b)
	%	%	%	%	%	%	%	%
Under 10 inches	19.7	Nil	13.0	82.8	58.0	Nil	24.7	37.6
10—15 "	23.5	22.4	14.4	9.4	22.4	Nil	32.4	19.9
15—20 "	17.5	15.2	19.7	4.5	6.8	0.7	9.7	10.9
20—25 "	14.2	17.9	18.8	2.2	3.7	11.0	6.6	9.1
25—30 "	9.1	18.0	11.6	0.8	3.7	11.4	9.3	7.3
30—40 "	9.9	16.1	11.1	0.3	3.3	20.4	4.7	6.6
Over 40 "	6.1	10.4	11.4	Nil	2.1	56.5	12.6	8.6
Total ..	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Includes Australian Capital Territory.

(b) Over an area of 2,777 square miles no records are available.

Referring first to the capital cities the records of which are given in the next table, it will be seen that Sydney, with a normal rainfall of 46.59 inches, occupies the chief place: Brisbane, Perth, Melbourne, Hobart, Canberra and Adelaide follow in that order, Adelaide with 21.18 inches being the driest. The extreme range from the wettest to the driest year is greatest at Brisbane (72.09 inches) and least at Adelaide (19.48 inches)

In order to show how the rainfall is distributed throughout the year in various parts of the continent, average figures for the various climatological districts have been selected. (See map on p. 38). The figures for Northern Rivers, District 14, show that nearly the whole of the rainfall occurs there in the summer months, while little or none falls in the middle of the year. The figures for the Central Coast, south-west of Western Australia (District 9), are the reverse for while the summer months are dry, the winter ones are very wet. In the districts containing Melbourne and Hobart the rain is fairly well distributed throughout the twelve months, with a maximum in October for both districts. In Queensland, the heaviest rains fall in the summer months, but good averages are also maintained during the other seasons in eastern parts.

On the coast of New South Wales, the first half of the year is the wettest, with heaviest falls in the autumn; the averages during the last six months are fair, and moderately uniform. Generally it may be said that approximately one-third of the area of the continent, principally in the eastern and northern parts, enjoys an annual average rainfall of from 20 to 50 inches or more, the remaining two-thirds averaging from 5 to 20 inches.

(vi) *Curves of Rainfall and Evaporation.* The relative amounts of rainfall and evaporation at different times through the year are clearly indicated in the graphs herein. Inspection thereof will show how large is the evaporation when water is fully exposed to the direct rays of the sun and to wind.

(vii) *Tables of Rainfall.* The table of rainfall for a fairly long period of years for each of the various Australian capitals affords information as to the variability of the fall in successive years, and the list of the more remarkable falls furnishes information as to what may be expected on particular occasions.

### RAINFALL : AUSTRALIAN CAPITAL CITIES.

Year.	CANBERRA.(a)		PERTH.		ADELAIDE.		BRISBANE.		SYDNEY.		MELBOURNE.		HOBART.	
	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.
1918 ..	in. 18.27	95	in. 39.58	138	in. 17.41	107	in. 24.95	121	in. 42.99	149	in. 27.13	160	in. 26.04	179
19 ..	16.31	85	30.66	120	17.21	108	19.36	93	58.71	152	24.89	141	22.48	153
20 ..	29.30	107	40.35	124	26.70	119	39.72	122	43.42	159	28.27	162	18.00	182
21 ..	..	..	41.09	135	22.64	100	54.31	167	43.34	140	29.76	154	18.04	159
22 ..	..	..	31.86	135	23.20	117	35.82	109	39.35	136	25.02	151	28.27	189
23 ..	..	..	44.47	134	29.79	139	23.27	93	37.01	123	22.64	158	32.93	198
24 ..	25.95	68	33.79	119	23.44	143	11.03	111	37.01	136	36.48	171	28.76	197
25 ..	33.71	99	31.41	126	21.91	118	53.10	139	50.35	145	17.57	144	22.67	170
26 ..	20.53	97	49.22	167	22.20	116	30.82	111	37.07	127	20.51	149	25.79	187
27 ..	21.40	83	36.59	133	16.92	101	62.08	130	48.56	138	17.98	135	20.13	185
28 ..	17.82	96	44.88	140	19.43	107	52.64	145	40.07	130	24.09	151	30.23	205
29 ..	22.34	88	36.77	132	17.51	119	39.78	118	57.90	129	28.81	168	26.55	194
30 ..	16.52	86	39.80	129	18.65	116	41.22	144	44.47	141	25.41	145	19.38	152
31 ..	24.25	105	39.18	118	22.26	145	66.72	136	49.22	153	28.63	164	27.17	179
32 ..	19.13	107	39.40	121	25.04	141	24.79	97	37.47	146	31.08	179	30.29	155
33 ..	20.30	88	32.47	116	22.12	130	49.71	118	42.71	153	22.28	136	23.18	182
34 ..	35.89	118	40.61	120	20.24	125	54.26	117	64.91	183	33.53	157	23.17	194
35 ..	24.40	102	32.28	129	23.45	140	34.64	111	30.97	131	29.98	183	32.22	196
36 ..	29.49	121	30.64	118	19.34	121	21.77	101	30.22	130	24.30	187	19.60	178
37 ..	22.50	93	35.28	120	23.01	128	34.79	113	52.00	157	21.45	144	20.65	160
38 ..	20.15	85	29.64	111	19.26	119	43.49	110	39.17	132	17.63	131	31.32	169
39 ..	26.95	128	45.70	123	23.29	139	41.43	122	33.67	127	33.11	166	27.23	188
40 ..	17.38	64	20.00	98	16.16	116	42.37	93	39.34	125	19.83	126	17.17	135
41 ..	19.55	91	34.74	122	22.56	126	31.50	105	26.74	129	31.78	157	23.49	145
42 ..	25.76	104	39.24	140	25.44	133	44.01	125	48.29	121	29.79	148	19.42	163
Average	23.05	95	34.75	121	21.18	124	44.71	124	46.59	154	25.69	140	23.96	153
No. of Years	28	28	66	66	104	104	91	91	84	84	87	87	100	99

(a) Records commenced in 1912; details are not available for the years 1921 to 1923.

10. **Remarkable Falls of Rain.**—The following are the most remarkable falls of rain in the various States and Territories which have occurred within a period of twenty-four hours. For other very heavy falls at various localities reference may be made to Official Year Book No. 14, pp. 60-64, No. 22, pp. 46-48 and No. 29, pp. 43, 44 and 51:—

### HEAVY RAINFALLS : NEW SOUTH WALES, UP TO 1942, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
		in.			in.
Broger's Creek ..	14 Feb., 1898	20.05	South Head (near Sydney) ..	16 Oct., 1844	20.41
" ..	13 Jan., 1911	20.83	Towanba ..	5 Mar., 1893	20.00
Cordeaux River ..	14 Feb., 1898	22.58	Viaduct Creek ..	15 „ 1936	20.00
Morpeth ..	9 Mar., 1893	21.52			



## HEAVY RAINFALLS : QUEENSLAND, UP TO 1942, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
		in.			in.
Babinda (Cairns) ..	2 Mar., 1935	24.14	Mackay ..	21 Jan., 1918a	24.70
Buderim Mountain	11 Jan., 1898	26.20	Macnade Mill ..	6 „ 1901	23.33
Crohanhurst			Plane Creek		
(Blackall Range)	2 Feb., 1893	35.71	(Mackay) ..	26 Feb., 1913	27.73
Deeral ..	2 Mar., 1935	27.60	Port Douglas ..	1 Apr., 1911	31.53
Goondi ..	30 Jan., 1913	24.10	Tully Mill ..	12 Feb., 1927	23.86
Harvey Creek ..	3 „ 1911	27.75	Woodlands (Yepp'n)	3 Jan., 1893	23.07
Kuranda (Cairns) ..	2 Apr., 1911	28.80	Yarrabah ..	2 Apr., 1911	30.65

(a) 37½ hours.

## HEAVY RAINFALLS : WESTERN AUSTRALIA, UP TO 1942, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
		in.			in.
Balla Balla ..	21 Mar., 1899	14.40	Pilbara ..	2 Apr., 1898	14.04
Boodarie ..	21 Jan., 1896	14.53	Roebuck Plains ..	5 Jan., 1917	14.01
Broome ..	6 „ 1917	14.00	„ „ ..	6 „ 1917	22.36
Derby ..	7 „ 1917	16.47	Thangoe ..	17-19 Feb. '96	24.18
Fortescue ..	3 May, 1890	23.36	Whim Creek ..	3 Apr., 1898	29.41
Marble Bar ..	2 Mar., 1941	12.00	Winderrie ..	17 Jan., 1923	14.23

## HEAVY RAINFALLS : NORTHERN TERRITORY, UP TO 1942, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
		in.			in.
Bathurst Island			Cape Don ..	13 Jan., 1934	13.58
Mission ..	7 Apr., 1925	11.85	Darwin ..	7 Dec., 1915	11.67
Birrimbah ..	6 Mar., 1935	16.50	Groote Eylandt ..	25 Mar., 1940	11.75
Borrooloola ..	14 „ 1899	14.00	Timber Creek ..	5 Feb., 1942	13.65
Brook's Creek ..	24 Dec., 1915	14.33			

## HEAVY RAINFALLS : SOUTH AUSTRALIA, UP TO 1942, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
		in.			in.
Cooper Pedy ..	19 Feb., 1938	6.50	Nunjikompita ..	21 Feb., 1938	6.50
Lobethal ..	18 Apr., 1938	6.44	Wilmington ..	1 Mar., 1921	7.12

## HEAVY RAINFALLS : VICTORIA, UP TO 1942, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
		in.			in.
Blackwood "Greenhill" ..	26 Jan., 1941	8.98	Korumburra ..	1 Dec., 1934	8.51
Cann River ..	16 Mar., 1938	9.94	Mt. Buffalo ..	6 June, 1917	8.53
Cunninghame ..	26 Dec., 1935	8.50	Murrungowar ..	16 Mar., 1938	8.36
Erica ..	1 Dec., 1934	8.66	Olinda ..	1 Dec., 1934	9.10
Hazel Park ..	1 „ „	10.50	Tambo Crossing ..	13 July, 1925	8.89
Kalorama ..	1 „ „	10.05	Tonghi Creek ..	27 Feb., 1919	9.90

## HEAVY RAINFALLS : TASMANIA, UP TO 1942, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
		in.			in.
Cullenswood ..	5 Apr., 1929	11.12	Riana ..	5 Apr., 1929	11.08
Gould's Country ..	8-10 Mar., '11	15.33	The Springs ..	30-31 Jan., '16	10.75
Lottah ..	8-10 „ „	18.10	Triabunna ..	5 June, 1923	10.20
Mathinna ..	5 Apr., 1929	13.25			

### HEAVY RAINFALLS : AUSTRALIAN CAPITAL TERRITORY, UP TO 1942, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
		in.			in.
Canberra ..	27 May, 1925	6.84	Uriarra ..	27 May, 1925	6.57
Cotter Junction ..	" "	7.13			

11. **Snowfall.**—Light snow has been known to fall occasionally as far north as latitude  $31^{\circ}$  S., and from the western to the eastern shores of the continent. During exceptional seasons, it has fallen simultaneously over two-thirds of New South Wales, and has extended at times along the whole of the Great Dividing Range, from its southern extremity in Victoria as far north as Toowoomba in Queensland. During the winter, for several months, snow covers the ground to a great extent on the Australian Alps, where also the temperature falls below zero Fahrenheit during the night. In the ravines around Mt. Kosciuszko and similar localities the snow never entirely disappears, after a severe winter.

12. **Hail.**—Hail falls most frequently along the southern shores of the continent in the winter, and over eastern Australia during the summer months. The size of the hailstones generally increases with distance from the coast. A summer rarely passes without some station experiencing a fall of stones exceeding in size an ordinary hen-egg, and many riddled sheets of light-gauge galvanized iron bear evidence of the weight and penetrating power of the stones.

The hailstones occur most frequently when the barometric readings indicate a flat and unstable condition of pressure. Tornadoes or tornadic tendencies are almost invariably accompanied by hail, and on the east coast the clouds from which the stones fall are frequently of a remarkable sepia-coloured tint.

13. **Barometric Pressures.**—The mean annual barometric pressure (corrected to sea level and standard gravity) in Australia varies from 29.80 inches on the north coast to 29.92 inches over the central and 30.03 inches in the southern parts of the continent. In January, the mean pressure ranges from 29.70 inches in the northern and central areas to 29.95 inches in the southern. The July mean pressure ranges from 29.90 inches at Darwin to 30.11 inches at Alice Springs. Barometer readings corrected to mean sea level and standard gravity have, under anticyclonic conditions in the interior of the continent, ranged as high as 30.78 inches (at Kalgoorlie on 28th July, 1901) and have fallen as low as 27.55 inches. This lowest record was registered at Mackay during a tropical hurricane on 21st January, 1918. An almost equally abnormal reading of 27.88 inches was recorded at Innisfail during a similar storm on 10th March, 1918. The mean barometric pressure for the Australian capitals is shown on the graphs herein.

14. **Wind.**—(i) *Trade Winds.* The two distinctive wind currents in Australia are as previously stated, the south-east trade and the prevailing westerly winds. As the belt of the earth's atmosphere in which they blow apparently follows the sun's ecliptic path north and south of the equator, so the area of the continent affected by these winds varies at different seasons of the year. During the summer months the anticyclonic belt travels in very high latitudes, thereby bringing the south-east trade winds as far south as  $30^{\circ}$  south latitude. The prevailing westerly winds retreat a considerable distance to the south of Australia, and are rarely in evidence in the hot months. When the sun passes to the north of the equator, the south-east trade winds follow it, and only operate to the north of the tropics for the greater part of the winter. The westerly winds come into lower latitudes during the same period of the year. They sweep across the southern areas of the continent from the Leeuwin to Cape Howe, and during some seasons are remarkably persistent and strong, and occasionally penetrate to almost tropical latitudes.

(ii) *Land and Sea Breezes.* The prevailing winds second in order of importance are the land and sea breezes. On the east coast the sea breezes which come in from the north-east, when in full force, frequently reach the velocity of a gale during the afternoon

in the summer months, the maximum hourly velocity, ordinarily attained about 3 p.m., not infrequently attaining a rate of 35 to 40 miles per hour. This wind, although strong, is usually shallow in depth, and does not ordinarily penetrate more than 9 or 12 miles inland.

The land breezes on the east coast blow out from a westerly direction during the night.

On the western shores of the continent the directions are reversed. The sea breezes come in from the south-west, and the land breezes blow out from the north-east.

(iii) *Inland Winds.* Inland, the direction of the prevailing winds is largely regulated by the seasonal changes of pressure, so disposed as to cause the winds to radiate spirally outward from the centre of the continent during the winter months, and to circulate spirally from the seaboard to the centre of Australia during the summer months.

(iv) *Prevailing Direction at the Capital Cities.* In Canberra at 9 a.m. the air is usually calm, particularly during the winter months, but a fair proportion of north-westerly and south-easterly winds occur during the last half of the year. At 3 p.m. the predominant wind is north-westerly with a fair proportion of westerlies.

In Perth at 9 a.m. north-east to south-east winds prevail from September to May, while from May to September north-east to north winds predominate. At 3 p.m. the prevailing wind is south-west to south during the warmer months and between north-west and south at other times.

In Adelaide at 9 a.m., the predominant wind is north-easterly from May to August, but during the rest of the year no particular direction is outstanding. At 3 p.m. the predominant wind is south-westerly for all months except June, July and August. Throughout the year winds with an easterly component are rare in the afternoon.

In Brisbane at 9 a.m. the most frequent winds during the colder two-thirds of the year come from the south or south-west, while in the warmer months south to south-east winds are more usual. At 3 p.m. winds with an easterly component predominate, especially north-easterlies during the warmer half of the year.

In Sydney at 9 a.m., by far the prevailing wind is a westerly, particularly during the colder two-thirds of the year. At 3 p.m. during the warmer two-thirds of the year, winds with an easterly component are most frequent with a smaller proportion of southerlies and westerlies during the winter months.

In Melbourne at 9 a.m., northerlies are the most frequent winds during the period February to October with a moderate proportion of westerlies in the spring. During the summer months, winds with a southerly component are in evidence to a slightly greater degree than any others. At 3 p.m. southerly winds prevail during the warmer two-thirds of the year with the frequency of northerlies increasing during the colder months.

In Hobart at 9 a.m. the most favoured directions are from the north-west and north with a good proportion of south-easterlies showing up at 3 p.m. during the warmer months.

15. *Cyclones and Storms.*—The “elements” in Australia are ordinarily peaceful, and while destructive cyclones have visited various parts, more especially coastal areas, such visitations are rare, and may be properly described as erratic.

During the winter months, the southern shores of the continent are subject to cyclonic storms, evolved from the V-shaped depressions of the southern low-pressure belt. They are felt most severely over the south-western parts of Western Australia, to the south-east of South Australia, in Bass Strait, including the coast-line of Victoria, and on the west coast of Tasmania. Apparently the more violent wind pressures from these cyclones are experienced in their northern half, or in that part of them which has a north-westerly to a south-westerly circulation.

The north-east coast of Queensland is occasionally visited by hurricanes from the north-east tropics. During the first four months of the year, these hurricanes appear to have their origin in the neighbourhood of the South Pacific Islands, their path being a parabolic curve first to the S.W. and finally towards the S.E. Only a small percentage, however, reach Australia, the majority recurving in their path to the east of New Caledonia.



Very severe cyclones, locally known as "willy willies," are peculiar to the north-west coast of Western Australia from the months of November to April, inclusive. They apparently originate in the ocean in the vicinity of Cambridge Gulf, and travel in a south-westerly direction with continually increasing force, displaying their greatest energy near Cossack and Onslow, between latitudes  $20^{\circ}$  and  $22^{\circ}$  South. The winds in these storms, like those from the north-east tropics, are very violent and destructive, and cause great havoc amongst the pearl-fishers. The greatest velocities are usually to be found in the south-eastern quadrant of the cyclones, with north-east to east winds. After leaving the north-west coast, these storms either travel southwards, following the coast-line, or cross the continent to the Great Australian Bight. When they take the latter course, their track is marked by torrential rains, as much as 29.41 inches, for example, being recorded in 24 hours at Whim Creek from one such occurrence. Falls of 10 inches and over have frequently been recorded in the northern interior of Western Australia from similar storms.

Some further notes on severe cyclones and on "southerly bursters" a characteristic feature of the eastern part of Australia, appear in previous issues of the Official Year Book (see No. 6, pp. 84-86), and a special article dealing with "Australian Hurricanes and Related Storms" appears in Official Year Book No. 16, pp. 80-84.

16. *Influences affecting Australian Climate.*—(i) *General.* Australian history does not cover a sufficient period, nor is the country sufficiently occupied, to ascertain whether or not the advance of settlement has materially affected the climate as a whole. Local changes have, however, taken place, a fact which suggests that settlement and the treatment of the land have a distinct effect on local conditions. For example, low-lying lands on the north coast of New South Wales, which originally were seldom subject to frosts, have, with the denudation of the surrounding hills from forests, experienced annual visitations, the probable explanation being that through the absence of trees the cold air of the highlands now flows unchecked and untempered down the sides of the hills to the valleys and lower lands.

(ii) *Influence of Forest on Climate.* As already indicated, forests doubtless exercise a great influence on local climate, and hence, to the extent that forestal undertakings will allow, the weather can be controlled by human agency. The direct action of forests is an equalizing one; thus, especially in equatorial regions, and during the warmest portion of the year, they considerably reduce the mean temperature of the air. They also reduce the diurnal extremes of shade temperatures by altering the extent of radiating surface by evaporation, and by checking the movement of air, and while decreasing evaporation from the ground, they increase the relative humidity. Vegetation greatly diminishes the rate of flow-off of rain and the washing away of surface soil, and when a region is protected by trees, a steadier water supply is ensured, and the rainfall is better conserved. In regions of snowfall, the supply of water to rivers is similarly regulated, and without this and the sheltering influence of ravines and "gullies," watercourses supplied mainly by melting snow would be subject to alternative periods of flooding and dryness. This is borne out in the case of the inland rivers, the River Murray, for example, which has never been known to become dry, deriving its steadiness of flow mainly through the causes indicated.

(iii) *Direct Influence of Forests on Rainfall.* Whether forests have a direct influence on rainfall is a debatable question, some authorities alleging that precipitation is undoubtedly induced by forests, while others take the opposite view.

Sufficient evidence exists, however, to prove that, even if the rainfall has not increased, the beneficial climatic effect of forest lands more than warrants their protection and extension. Rapid rate of evaporation, induced by both hot and cold winds, injures crops and makes life uncomfortable on the plains, and, while it may be doubted that the forest aids in increasing precipitation, it must be admitted that it does check winds and the rapid evaporation due to them. Trees as wind-breaks have been successfully planted in central parts of the United States of America, and there is no reason why similar experiments should not be successful in many parts of the treeless interior of Australia. The belts should be planted at right angles to the direction of the prevailing parching winds, and if not more than half a mile apart will afford shelter to the enclosed areas.

17. *Rainfall and Temperatures, Various Cities.*—The Official Year Book No. 34, p. 28, shows rainfall and temperature for various important cities throughout the world, and for the Australian capitals.

18. Climatological Tables.—The averages and extremes for a number of climatological elements have been determined from long series of observations at the Australian capitals up to and including the year 1942. These are given in the following tables:—

## CLIMATOLOGICAL DATA: CANBERRA, AUSTRALIAN CAPITAL TERRITORY.

LAT. 35° 20' S., LONG. 149° 15' E. HEIGHT ABOVE M.S.L. 1,906 FT.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.

Month.	No. of years observations.	Bar. corrected to 32° F. Mm. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind.				Mean Amount of Evaporation (inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m. and 3 p.m.	No. of Clear Days.
			Anemometer 72 feet above surface.			Prevailing Direction.				
			Mean Speed (miles per hour).	Highest Mean Speed in One Day (miles per hour).	Max. Gust Speed (miles per hour).					
	25	14	14	(a)	26	11	14	14	24	17
January ..	29.835	5.6	14.9 23/33	—	E	W	8.980	3.2	4.5	8.1
February ..	29.906	5.0	15.3 24/33	—	E	NW & W	7.041	3.7	4.6	7.8
March ..	30.004	4.4	18.2 28/42	—	E	E	5.782	3.5	4.7	8.1
April ..	30.073	4.1	13.6 29/29	—	E & SE	NW	3.479	2.4	4.7	6.8
May ..	30.143	3.2	12.6 3/30	—	E	NW	2.063	0.7	4.9	8.0
June ..	30.122	3.9	16.1 2/30	—	N & NW	N	1.264	1.0	5.3	5.8
July ..	30.122	3.7	23.4 7/31	—	E	NW & W	1.323	0.3	5.1	7.2
August ..	30.071	4.6	15.7 25/36	—	N	W	1.848	1.1	4.9	7.1
September ..	30.036	5.2	17.4 28/34	—	E	NW	3.116	1.5	4.3	9.1
October ..	29.961	4.9	12.4 27/40	—	E	NW & W	4.825	1.9	4.9	7.6
November ..	29.903	5.2	17.2 28/42	—	E	W	6.294	3.5	4.9	7.3
December ..	29.846	5.4	16.1 11/38	—	E	NW	7.987	5.7	5.0	6.5
Year { Totals ..	—	—	—	—	—	—	54.002	28.5	—	89.4
Year { Averages	30.002	4.6	—	—	E	NW	—	—	4.8	—
Year { Extremes	—	—	23.4 7/7/31	—	—	—	—	—	—	—

(a) No record.

## TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).		Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
	26	26	26	26	26		(a)	24	19
No. of yrs. over which observations extend.	26	26	26	26	26	26	—	—	—
January	82.4	55.7	69.1	109.0	11/39	38.2	8/38	70.8	—
February	81.9	55.3	68.6	102.6	16/19	33.0	21/33	69.6	—
March	76.3	51.3	63.8	99.2	6/38	31.0	24/35	68.2	—
April	67.2	44.2	55.7	91.0	6/38	26.5	29/17	64.5	—
May	59.6	37.5	48.5	74.7	9/19	19.0	30/24	55.7	—
June	53.2	34.4	43.8	66.2	5/17	17.8	20/35	48.4	—
July	52.1	33.3	42.7	65.0	8/19	14.0	19/24	51.0	—
August	55.6	35.0	45.3	73.0	(b)	18.0	5/19	55.0	—
September	61.3	38.3	49.8	83.2	27/19	24.0	12/39	59.2	—
October	68.1	43.0	55.5	93.8	31/19	27.0	2/18	66.8	—
November	74.6	48.5	61.5	97.7	29/36	28.1	24/15	69.6	—
December	79.8	53.3	66.6	103.4	27/38	32.0	3/24	71.4	—
Year { Averages	67.7	44.1	55.9	—	—	—	—	—	—
Year { Extremes	—	—	—	109.0	14.0	95.0	—	9.9	2,453.3(e)
				11/1/39	19/7/24			20/6/35	

(a) No record.

(b) 28/23 and 23/24.

(c) 19/24 and 24/35.

(d) 1/23 and 3/23.

(e) Total for year.

## HUMIDITY, RAINFALL AND FOG.

Month.	Vapour Pressure (Inches).	Rel. Hum. (%) at 9 a.m.			Rainfall (Inches).				Fog.
		Mean.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	
		Mean 9 a.m.	Mean.	Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	
No. of yrs. over which observations extend.	24	24	24	24	28	28	28	28	15
January	0.381	56	69	39	2.02	6	6.69	1941	0.07
February	0.398	61	75	47	1.69	6	4.07	1936	0.00
March	0.376	68	81	48	2.06	6	5.81	1914	0.01
April	0.318	74	87	61	1.74	7	7.37	1940	0.07
May	0.248	82	92	67	1.90	7	13.37	1925	0.06
June	0.217	85	93	73	2.06	9	5.86	1931	0.44
July	0.204	84	92	74	1.72	9	4.15	1933	0.25
August	0.217	80	87	67	2.13	10	4.67	1939	0.01
September	0.248	71	81	55	1.73	9	5.26	1915	0.36
October	0.284	63	73	48	2.14	9	7.50	1934	0.34
November	0.327	58	78	37	1.90	8	6.95	1924	0.09
December	0.363	55	70	37	1.96	9	4.49	1919	0.11
Year { Totals	—	—	—	—	23.05	95	—	—	—
Year { Averages	0.286	70	—	—	—	—	—	—	—
Year { Extremes	—	—	93	37	—	—	13.37	5/1925	0.00
							2/1933	6.84	27/5/25

(a) 1919 and 1932.

## CLIMATOLOGICAL DATA : PERTH, WESTERN AUSTRALIA.

LAT. 31° 57' S., LONG. 115° 51' E. HEIGHT ABOVE M.S.L. 197 Ft.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.

Month.	No. of years observations.	Bar. corrected to 32° F. M.Sea- level and Stan- dard Gravity from 9 a.m. and 3 p.m. readings.	Wind.				Mean Amount of Evaporation (inches).	No. of Days Lightning.	Mean Amount of Clouds 9 a.m., 3 p.m. and 9 p.m.	No. of Clear Days.	
			Anemometer 71 feet above surface.			Prevailing Direction.					
			Mean Speed (miles per hour).	Highest Mean Speed in One Day (miles per hour).	Max. Gust Speed (miles per hour).						
					9 a.m.	3 p.m.					
January	..	29.905	14.6	33.2 27/98	49	ESE	SSW	10.35	1.9	2.9	14.2
February	..	29.925	14.0	27.1 6/08	50	ESE	SSW	8.64	1.5	3.0	12.5
March	..	29.983	13.1	27.1 6/13	54	ESE	SSW	7.50	1.7	3.5	12.1
April	..	30.071	11.0	39.8 25/00	61	E	SSW	4.72	1.6	4.2	8.5
May	..	30.067	10.7	34.4 24/32	73	NE	SW	2.74	2.4	5.4	5.7
June	..	30.060	11.0	38.1 17/27	80	NNE	WNW	1.75	2.3	5.9	4.1
July	..	30.092	11.3	42.3 20/26	73	NNE	W	1.71	2.0	5.6	5.1
August	..	30.083	11.9	40.3 15/03	72	NNE	WSW	2.35	1.6	5.6	5.5
September	..	30.065	12.1	36.0 11/05	75	NE	WSW	3.40	1.2	4.9	6.4
October	..	30.032	12.9	33.7 6/16	61	SE	SW	5.34	1.0	4.9	6.8
November	..	29.991	13.7	32.4 18/97	54	SE	SW	7.64	1.5	3.9	8.5
December	..	29.927	14.3	32.3 6/22	58	SE	SSW	9.77	1.8	3.2	12.8
Year { Totals ..		" —	—	—	—	—	—	65.91	20.5	—	102.2
{ Averages		30.017	12.6	—	—	E	SW	—	—	4.4	—
{ Extremes		—	—	42.3 20/7/26	80	—	—	—	—	—	—

## TEMPERATURE AND SUNSHINE.

Month.	Mean Tempera- ture (Fahr.).			Extreme Shade Temperature (Fahr.).		Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
	No. of yrs. over which observations extend.								
January ..	46	46	46	46	46	46	45	45	45
February ..	84.6	63.2	73.9	110.2 21/34	48.6 20/25	61.6	177.3 22/14	40.4 1/21	323.7
March ..	85.1	63.5	74.3	112.2 8/33	47.7 1/02	64.5	173.7 4/34	39.8 1/13	275.8
April ..	81.4	61.2	71.3	106.4 14/22	45.8 8/03	60.6	167.0 19/08	36.7 8/03	269.8
May ..	76.2	57.2	66.7	99.7 9/10	39.3 20/14	60.4	157.0 8/16	31.0 21/14	219.7
June ..	69.0	52.8	60.9	90.4 2/07	34.3 11/14	56.1	146.0 4/25	25.3 11/14	177.9
July ..	64.1	49.7	56.9	81.7 2/14	35.0 30/20	46.7	135.5 9/14	26.3 11/37	145.1
August ..	62.7	47.8	55.3	76.4 21/21	34.2 7/16	42.2	132.9 25/13	25.1 30/20	165.5
September ..	63.9	48.4	56.1	81.0 12/14	35.4 31/08	45.6	145.1 29/21	26.7 24/35	185.6
October ..	66.5	50.3	58.4	90.9 30/18	38.8 18/00	52.1	153.6 29/16	29.2 21/16	209.7
November ..	69.3	52.5	60.9	95.3 30/22	40.0 16/31	55.3	157.5 31/36	29.8 16/31	245.5
December ..	76.1	56.9	66.5	104.6 24/13	42.0 1/04	62.6	167.0 13/15	35.4 6/10	289.4
Year {	81.3	60.9	71.1	107.9 20/04	48.0 2/10	59.9	168.8 11/25	39.0 (a)	235.3
Averages	73.4	55.4	64.4	—	—	—	—	—	2833.0
Extremes	—	—	—	112.2 8/2/33	34.2 7/7/16	78.0	177.3 22/1/14	25.1 30/7/20	—

(a) 2/1910 and 12/1920.

(b) Total for year.

## HUMIDITY, RAINFALL AND FOG.

Month.	Vapour Pres- sure (Inches).	Rel. Hum. (%) at 9 a.m.			Rainfall (Inches).					Fog. Mean No. of Days Fog.
		Mean.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.	
	Mean 9 a.m.									
No. of yrs. over which observations extend.	45	45	45	45	66	66	66	66	66	46
January ..	0.435	51	61	41	0.33	3	2.17 1879	0.00 (a)	1.74 27/79	0.2
February ..	0.446	53	65	46	0.39	3	2.98 1915	0.00 (a)	1.63 26/15	0.2
March ..	0.433	58	66	46	0.82	4	5.71 1934	0.00 (a)	3.03 9/34	0.5
April ..	0.394	61	73	51	1.73	7	5.85 1926	0.00 1920	2.62 30/04	0.9
May ..	0.366	72	81	61	5.07	14	12.13 1879	0.98 1903	3.00 17/42	1.4
June ..	0.338	76	83	68	7.09	17	12.80 1923	2.16 1877	3.90 6/20	1.5
July ..	0.316	76	84	69	6.71	18	12.28 1926	2.42 1876	3.00 4/91	1.7
August ..	0.320	73	79	62	5.72	18	12.21 1928	0.46 1902	2.79 7/03	0.9
September ..	0.340	67	75	58	3.39	15	7.84 1923	0.34 1916	1.82 4/31	0.2
October ..	0.344	60	75	54	2.18	12	7.87 1890	0.49 1892	1.73 3/33	0.1
November ..	0.375	54	63	46	0.76	6	2.78 1916	0.00 1891	1.37 2/38	0.1
December ..	0.408	50	63	44	0.56	4	3.05 1888	0.00 (b)	1.72 1/88	0.2
Year {	—	—	—	—	—	—	—	—	—	7.9
Averages	0.371	61	—	—	34.75	121	—	—	—	—
Extremes	—	—	84	41	—	—	12.80 6/1923	0.00 (c)	3.90 6/6/20	—

(a) Various years.

(b) 1886 and 1924.

(c) Various months in various years.



## CLIMATOLOGICAL DATA : ADELAIDE, SOUTH AUSTRALIA.

LAT. 34° 56' S., LONG. 138° 35' E. HEIGHT ABOVE M.S.L. 140 FT.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.

Month.	Bar. corrected to 32° F., M.S.L. Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind.					Mean Amount of Evaporation (inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m. and 9 p.m.	No. of Clear Days.
		Anemometer 75 feet above surface.			Prevailing Direction.					
		Mean Speed (miles per hour).	Highest Mean Speed in One Day (miles per hour).	Max. Gust Speed (miles per hour). <sup>a</sup>						
No. of years observations.	86	65	65	26	9 a.m.	3 p.m.	73	71	75	61
January ..	29.916	10.5	31.6 19/99	72	SW	SW	9.15	2.2	3.6	8.7
February ..	29.954	9.7	28.8 22/96	57	NE	SW	7.46	1.9	3.5	7.8
March ..	30.038	8.8	26.2 9/12	52	S	SW	6.08	2.0	4.0	7.5
April ..	30.120	8.4	32.2 10/96	57	NE	SW	3.59	1.6	5.0	4.6
May ..	30.126	8.3	31.7 9/80	55	NE	NW	2.12	1.7	5.8	2.4
June ..	30.104	8.9	31.3 12/78	56	NE	N	1.30	1.8	6.2	1.8
July ..	30.125	8.9	28.1 25/82	55	NE	NW	1.31	1.6	5.9	1.9
August ..	30.094	9.5	32.2 31/97	56	NE	SW	1.92	2.1	5.6	2.7
September ..	30.043	10.0	30.0 2/87	69	NNE	SW	2.93	2.2	5.2	3.4
October ..	30.000	10.4	32.0 28/98	59	NNE	SW	4.88	3.2	5.1	3.9
November ..	29.980	10.4	28.2 2/04	63	SW	SW	6.71	3.2	4.7	5.5
December ..	29.932	10.5	28.1 12/91	75	SW	SW	8.59	2.5	4.0	7.0
Year { Totals ..	—	—	—	—	—	—	56.04	26.0	—	57.2
Averages	30.035	9.5	—	—	NE	SW	—	—	4.9	—
Extremes	—	—	32.2 (b)	75	—	—	—	—	—	—

(a) Figures previously published estimated from Cup Anemographs in use prior to 1917.

(b) 10/4/96 and 31/8/97.

## TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).		Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
No. of yrs. over which observations extend.	86	86	86	86	86	86	55	82	61
January ..	85.9	61.4	73.7	117.7 12/39	45.1 21/84	72.6	180.0 18/82	36.5 14/79	307.0
February ..	85.9	61.8	73.9	113.6 12/99	45.5 23/18	68.1	170.5 10/00	35.8 23/26	262.8
March ..	81.0	59.0	70.0	110.5 9/34	43.9 21/33	66.6	174.0 17/83	32.1 21/33	240.6
April ..	73.3	54.6	63.9	98.6 5/38	39.6 15/59	59.0	155.0 1/83	30.2 16/17	179.8
May ..	65.9	50.3	58.1	89.5 4/21	36.9 (a)	52.6	148.2 12/79	25.6 19/28	148.5
June ..	60.5	46.7	53.6	76.0 23/65	32.5 27/76	43.5	138.8 18/79	22.9 12/13	122.9
July ..	59.1	44.8	51.9	74.0 11/06	32.0 24/08	42.0	134.5 26/90	22.1 30/29	135.4
August ..	62.0	45.9	53.9	85.0 31/11	32.3 17/59	52.7	140.0 31/92	22.8 11/20	104.0
September ..	66.4	47.9	57.1	90.7 23/82	32.7 4/58	58.0	160.5 23/82	25.0 25/37	181.9
October ..	72.5	51.4	61.9	102.9 21/22	36.0 —/57	66.9	162.0 30/21	27.8 (b)	226.7
November ..	78.6	55.3	66.9	113.5 21/65	40.8 2/09	72.7	166.9 20/78	31.5 2/09	261.5
December ..	83.2	58.9	71.1	114.6 29/31	43.0 (c)	71.6	175.7 7/99	32.5 4/84	298.2
Year { Averages	72.8	53.2	63.0	—	—	85.7	—	—	2532.3d
Extremes	—	—	—	117.7 12/1/39	32.0 24/7/08	—	180.0 18/1/82	22.1 30/7/29	—

(a) 26/1895 and 24/1904.

(b) 2/1918 and 4/1931.

(c) 16/1861 and 4/1906.

(d) Total for year.

## HUMIDITY, RAINFALL AND FOG.

Month.	Vapour Pres- sure (inches).	Rel. Hum. (%) at 9 a.m.			Rainfall (inches).					Fog.	
	Mean 9 a.m.	Mean.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.	Mean No. of Days Fog.	
No. of yrs. over which observations extend.	75	75	75	75	104	104	104	104	104	43	
January .. ..	0.339	38	59	29	0.78	4	4.00	1850	0.00 (a)	2.30 2/89	—
February .. ..	0.357	41	56	30	0.74	4	6.09	1925	0.00 (a)	5.57 7/25	—
March .. ..	0.345	46	58	29	1.01	6	4.60	1878	0.00 (a)	3.50 5/78	—
April .. ..	0.336	56	72	37	1.76	10	6.78	1853	0.03 1923	3.15 5/60	—
May .. ..	0.316	67	76	49	2.70	13	7.75	1875	0.10 1934	2.75 1/53	0.5
June .. ..	0.297	76	84	67	3.04	16	8.58	1916	0.42 1886	2.11 1/20	1.1
July .. ..	0.279	76	87	66	2.63	16	5.38	1865	0.37 1899	1.75 10/65	1.4
August .. ..	0.286	69	78	54	2.55	16	6.24	1852	0.35 1914	2.23 19/51	0.5
September .. ..	0.293	60	72	44	2.09	14	5.83	1923	0.45 1896	1.59 20/23	0.2
October .. ..	0.298	51	67	29	1.69	11	3.83	1870	0.17 1914	2.24 16/08	—
November .. ..	0.307	42	57	31	1.17	8	4.10	1934	0.04 1885	2.08 7/34	—
December .. ..	0.321	39	50	31	1.02	6	3.98	1861	0.00 1904	2.42 23/13	—
Year { Totals .. ..	—	—	—	—	21.18	124	—	—	—	—	3.7
Averages .. ..	0.300	53	—	—	—	—	8.58	6/16	0.00 (b)	5.57 7/2/25	—
Extremes .. ..	—	—	87	29	—	—	—	—	—	—	—

(a) Various years.

(b) Various months in various years.

## CLIMATOLOGICAL DATA : BRISBANE, QUEENSLAND.

LAT. 27° 28' S., LONG. 153° 1' E. HEIGHT ABOVE M.S.L. 134 FT.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.

Month.	Bar. corrected to 32° F. Mm. Sea-level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind. Anemometer 105 feet above surface.				Mean Amount of Evaporation (inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m. and 9 p.m.	No. of Clear Days.
		Mean Speed (miles per hour).	Highest Mean Speed in One Day (miles per hour).	Max. Gust Speed (miles per hour).	Prevalling Direction.				
No. of years observations.	56	28	28	28	56	56	34	56	34
January ..	29.868	7.1	15.5 18/42	51	SE	E & NE	6.715	7.2	5.7
February ..	29.904	7.1	21.0 5/31	67	S & SE	NE & E	5.424	5.6	5.8
March ..	29.964	6.7	20.3 1/29	50	S	SE & E	5.044	4.6	5.3
April ..	30.044	6.2	16.7 3/25	57	S	SE & E	3.992	3.9	4.5
May ..	30.088	5.9	17.9 17/26	45	S	SE	3.090	3.2	4.3
June ..	30.075	5.9	19.0 14/28	58	SW & S	S & W	2.429	2.4	4.2
July ..	30.079	5.7	15.0 2/23	52	S & SW	SW	2.706	2.6	3.7
August ..	30.096	5.9	14.8 4/35	53	S & SW	SW & NE	3.489	3.7	3.3
September ..	30.050	6.1	13.7 4/31	53	S & SW	NE & E	4.503	5.5	3.4
October ..	30.006	6.5	15.7 1/41	62	S	NE	5.678	6.7	4.1
November ..	29.959	6.9	15.5 10/28	59	SE & NE	NE	6.301	8.6	4.9
December ..	29.891	7.2	19.5 15/26	78	SE	NE	6.989	9.3	5.3
Year { Totals ..	—	—	—	—	—	—	56.360	63.3	90.9
Averages	30.000	6.4	—	—	S	NE	—	—	—
Extremes	—	—	21.0 5/2/31	78	—	—	—	—	—

## TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).		Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.		Highest. in Sun.	Lowest on Grass.	
No. of yrs. over which observations extend.	56	56	56	56	56	56	48	56	34
January .. ..	85.4	69.1	77.3	109.8 26/40	58.8 4/93	51.0	169.0 2/37	49.9 4/93	232.8
February .. ..	84.4	68.6	76.5	105.7 21/25	58.5 23/31	47.2	165.2 6/10	49.1 22/31	206.9
March .. .. .	82.3	66.4	74.4	99.4 5/19	52.4 29/13	47.0	162.5 6/39	45.4 29/13	213.8
April .. .. .	78.9	61.5	70.2	95.2 (a)	44.4 25/25	50.8	153.8 11/16	36.7 24/25	211.2
May .. .. .	73.6	55.6	64.6	90.3 21/23	41.3 24/99	49.0	147.0 1/10	29.8 8/97	203.7
June .. .. .	69.3	51.2	60.3	88.9 19/18	36.3 29/08	52.6	136.0 3/15	25.4 23/88	186.8
July .. .. .	68.5	48.8	58.6	83.4 28/98	36.1 (b)	47.3	146.1 20/15	23.9 11/90	212.7
August .. ..	71.2	50.0	60.6	88.5 25/28	37.4 6/87	51.1	141.9 20/17	27.1 9/99	241.4
September ..	75.6	54.8	65.2	95.2 16/12	40.7 1/96	54.5	155.5 26/03	30.4 1/89	247.4
October .. ..	79.4	60.1	69.8	101.4 18/93	43.3 3/99	58.1	157.4 31/18	34.9 8/89	257.5
November ..	82.4	64.3	73.4	106.1 18/13	48.5 2/05	57.6	162.3 7/89	38.8 1/05	244.0
December ..	84.7	67.4	76.1	105.9 26/93	56.4 13/12	49.5	162.1 26/37	49.1 3/94	252.5
Year { Averages ..	78.0	59.8	68.9	—	—	—	—	—	2710.7d
Extremes ..	—	—	—	109.8 26/1/40	36.1 (c)	73.7	169.0 2/1/37	23.9 11/7/90	—

(a) 9/1896 and 5/1903.

(b) 12/1894 and 2/1896.

(c) 12/7/94 and 2/7/96.

(d) Total for year.

## HUMIDITY, RAINFALL AND FOG.

Month.	Vapour Pres- sure (inches).	Rel. Hum. (%). At 9 a.m.			Rainfall (inches).						Fog.
	Mean 9 a.m.	Mean.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.	Mean No. of Days Fog.	
No. of yrs. over which observations extend.	56	56	56	56	91	82	91	91	73	56	
January .. ..	0.641	66	79	53	6.38	13	27.72 1895	0.32 1919	18.31 21/87	0.5	
February .. ..	0.646	69	82	55	6.27	13	40.39 1893	0.58 1849	10.61 6/31	0.7	
March .. ..	0.615	72	85	56	5.74	14	34.04 1870	0.00 1849	11.18 14/08	1.3	
April .. ..	0.521	72	80	60	3.70	11	15.28 1867	0.05 1897	5.46 5/33	2.7	
May .. ..	0.426	73	85	61	2.79	10	13.85 1876	0.00 1846	5.62 9/79	3.9	
June .. ..	0.358	73	84	63	2.61	8	14.03 1873	0.00 1847	6.01 9/93	3.9	
July .. ..	0.328	72	81	61	2.16	8	8.46 1889	0.00 1841	3.54 (c)	3.9	
August .. ..	0.346	68	80	56	1.90	7	14.67 1879	0.00 (a)	4.89 12/87	4.4	
September ..	0.406	63	76	47	1.93	8	5.43 1886	0.10 1907	2.46 2/94	2.6	
October .. ..	0.473	59	72	48	2.54	9	9.99 1882	0.14 1900	3.75 3/27	1.4	
November ..	0.536	60	72	45	3.74	11	12.41 1917	0.00 1842	4.46 16/86	0.5	
December ..	0.596	61	70	51	4.95	12	17.36 1942	0.35 1865	6.60 25/71	0.3	
Year { Totals ..	—	—	—	—	44.71	124	—	—	—	26.1	
Averages	0.491	68	—	—	—	—	—	—	—	—	
Extremes	—	—	85	45	—	—	40.39 2/93	0.00 (b)	18.31 21/1/87	—	

(a) 1862, 1869, 1880.

(b) Various months in various years.

(c) 15/1876 and 16/1889.

## CLIMATOLOGICAL DATA : SYDNEY, NEW SOUTH WALES.

LAT. 33° 52' S., LONG. 151° 12' E. HEIGHT ABOVE M.S.L. 138 FT.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.

Month.	Bar. corrected to 32° F. M.S. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind.					Mean Amount of Evaporation (inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m. and 9 p.m.	No. of Clear Days.
		Anemometer 56 feet above surface.								
		Mean Speed (miles per hour).	Highest Mean Speed in One Day (miles per hour).	Max. Gust Speed (miles per hour).	Prevailing Direction.					
No. of years observations.	33	76	76	23	9 a.m.	3 p.m.	63	83	81	32
January ..	29.878	9.3	26.1 3/93	63	ENE	ENE	5.438	5.0	5.8	4.7
February ..	29.947	8.8	29.0 12/69	59	NE	ENE	4.333	4.2	5.9	5.4
March ..	30.008	7.7	31.4 20/70	58	W	ENE	3.714	4.0	5.5	5.9
April ..	30.073	7.3	26.7 6/82	64	W	ENE	2.687	3.6	5.1	7.0
May ..	30.097	7.2	28.4 6/98	57	W	NE	1.892	2.9	4.9	7.5
June ..	30.078	8.0	26.7 13/08	67	W	W	1.490	2.1	4.8	8.3
July ..	30.066	8.0	31.0 17/79	68	W	W	1.575	2.1	4.4	10.1
August ..	30.064	7.8	27.0 22/72	68	W	W NE	2.047	3.0	4.0	11.1
September ..	30.019	8.4	32.1 6/74	70	W	NE	2.814	3.8	4.3	10.1
October ..	29.976	8.8	30.9 4/72	95	W	ENE	3.947	4.7	5.0	7.2
November ..	29.936	9.0	24.3 12/87	64	NE	ENE	4.728	5.3	5.6	5.6
December ..	29.881	9.2	31.3 3/84	75	E	ENE	5.500	5.7	5.7	4.8
Year { Totals ..	—	—	—	—	—	—	40.165	46.4	—	87.7
{ Averages	30.002	8.3	—	—	W	ENE	—	—	—	—
{ Extremes	—	—	32.1 6/9/74	95	—	—	—	—	5.1	—

## TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).		Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
No. of yrs. over which observations extend.	84	84	84	84	84	84	80	84	22
January .. .. .	78.4	64.9	71.6	113.6 14/39	51.2 14/65	62.4	164.3 26/15	43.7 6/25	224.6
February .. .. .	77.7	65.0	71.3	107.8 8/26	49.3 25/63	58.5	168.3 14/39	42.8 22/33	203.8
March .. .. .	75.8	63.0	69.4	102.6 3/69	48.8 14/86	53.8	158.3 10/26	39.9 17/13	197.8
April .. .. .	71.4	58.0	64.7	91.4 1/36	44.6 27/64	46.8	144.1 10/77	33.3 24/09	183.4
May .. .. .	65.7	52.1	58.9	86.0 1/19	40.2 22/59	45.8	129.7 1/96	29.3 25/17	177.3
June .. .. .	61.3	48.2	54.8	80.4 11/31	35.7 22/32	44.7	125.5 2/23	28.0 22/32	162.6
July .. .. .	59.9	45.9	52.9	78.3 22/26	35.9 12/90	42.4	124.7 19/77	24.0 4/93	188.0
August .. .. .	63.0	47.5	55.3	82.0 31/84	36.8 3/72	45.2	149.0 30/78	26.1 4/09	219.8
September .. .. .	67.2	51.3	59.3	92.3 27/19	40.8 18/64	51.5	142.2 12/78	30.1 17/05	221.5
October .. .. .	71.3	55.8	63.6	99.4 4/42	42.2 6/27	57.2	152.2 20/33	32.7 9/05	230.4
November .. .. .	74.3	59.6	67.0	103.2 30/41	43.2 7/39	60.0	158.5 28/09	36.0 6/06	230.5
December .. .. .	77.1	62.9	70.0	107.5 31/04	48.4 3/24	59.1	164.5 27/89	41.4 3/24	230.4
Year { Averages .. .. .	70.3	56.2	63.2	—	—	—	—	—	2470.10
Extremes .. .. .	—	—	—	113.6 14/1/39	35.7 22/6/32	77.9	168.3 14/2/39	24.0 4/7/93	—

(a) Total for year.

## HUMIDITY, RAINFALL AND FOG.

Month.	Vapour Pres- sure (Inches).	Rel. Hum. (%) 9 a.m.			Rainfall (Inches).					Fog.
		Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.	Mean No. of Days Fog.
No. of yrs. over which observations extend.	67	67	67	67	84	84	84	84	84	22
January .. ..	0.541	66	78	58	3.56	14	15.26 1911	0.25 1932	7.08 13/11	0.4
February .. ..	0.560	71	81	60	4.07	13	18.56 1873	0.12 1939	8.90 25/73	0.9
March .. ..	0.532	73	85	63	5.03	14	20.52 1942	0.42 1876	11.05 28/42	2.0
April .. ..	0.442	75	87	63	5.33	14	24.49 1861	0.06 1868	7.52 29/60	3.3
May .. ..	0.359	77	90	63	4.92	14	23.03 1919	0.18 1860	8.36 28/89	4.5
June .. ..	0.301	77	89	68	4.67	13	16.30 1885	0.19 1904	5.17 16/84	4.3
July .. ..	0.276	76	88	63	4.66	12	13.21 1900	0.12 1862	7.80 7/31	3.4
August .. ..	0.288	71	84	56	2.90	11	14.89 1899	0.04 1885	5.33 2/60	2.8
September ..	0.330	65	79	49	2.82	12	14.04 1879	0.08 1882	5.69 10/79	0.9
October .. ..	0.383	63	77	42	2.87	12	11.14 1916	0.21 1867	6.37 13/02	0.7
November ..	0.444	63	79	44	2.80	12	9.88 1865	0.07 1915	4.23 19/00	0.7
December ..	0.503	64	77	52	2.96	13	15.82 1920	0.23 1913	4.75 13/10	0.4
Year { Totals .. ..	—	—	—	—	46.59	154	—	—	—	24.3
Averages ..	0.402	70	—	—	—	—	—	—	—	—
Extremes ..	—	—	90	42	—	—	24.49 4/1861	0.04 8/1885	11.05 28/3/42	—



## CLIMATOLOGICAL DATA : MELBOURNE, VICTORIA.

LAT. 37° 49' S., LONG. 144° 58' E. HEIGHT ABOVE M.S.L. 114 Ft.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.

Month.	Bar. corrected to 32° F. M.S. Sea Level and Stan- dard Gravity from 9 a.m. and 3 p.m. readings	Wind.				Mean Amount of Evaporation (inches).	No. of Days Lightning.	Mean Amount of Clouds 9 a.m., 3 p.m. and 9 p.m.	No. of Clear Days.	
		Anemometer 93 feet above surface.			Prevailing Direction.					
		Mean Speed (miles per hour).	Highest Mean speed in One Day (miles per hour). (a)	Max. Gust Speed (miles per hour).						
No. of years observations.	85	30	30	19	9 a.m.	3 p.m.	70	35	85	35
January ..	29.907	7.3	21.1 27/41	66	S & SW	S	6.416	1.7	5.1	6.8
February ..	29.958	6.7	14.8 4/34	66	N & S	S	5.044	2.3	4.9	6.5
March ..	30.032	6.2	16.5 (b)	66	N	S	4.039	1.7	5.4	5.4
April ..	30.101	5.6	17.1 18/38	59	N	S	2.419	1.3	5.9	4.5
May ..	30.108	5.4	17.9 25/40	72	N	N	1.506	0.6	6.5	3.8
June ..	30.083	5.8	16.2 27/42	60	N	N	1.137	0.4	6.6	2.6
July ..	30.089	5.9	20.0 28/40	58	N	N	1.099	0.3	6.4	2.8
August ..	30.050	6.3	21.3 20/42	61	N	N	1.490	0.9	6.3	2.9
September ..	29.999	6.8	17.8 5/42	68	N & W	N & S	2.335	1.2	6.1	3.2
October ..	29.969	6.8	16.3 7/12	69	N & SW	S	3.372	1.7	6.0	3.9
November ..	29.952	7.0	16.6 14/30	65	S & SW	S	4.532	2.4	6.0	3.6
December ..	29.900	7.2	18.9 1/34	61	S & SW	S	5.756	1.9	5.5	4.4
Year { Totals ..	30.013	6.4	—	—	—	—	39.151	16.4	—	49.8
Year { Averages	—	—	—	—	—	—	—	—	—	—
Year { Extremes	—	—	21.3 20/8/42	72	N	S	—	—	5.9	—

(a) Revised for 30 years—1912 and 1914-1942 inclusive.

(b) 22/31 and 3/41.

## TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).		Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine (a)
	Mean	Mean	Mean.	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
	Max.	Min.							
No. of yrs. over which observations extend.	87	87	87	87	87	87	82	83	27
January .. ..	78.0	56.7	67.4	114.1 13/39	42.0 28/85	72.1	178.5 14/62	30.2 28/85	234.9
February .. ..	78.1	57.1	67.6	109.5 7/01	40.2 24/24	69.3	167.5 15/70	30.9 6/91	211.2
March .. ..	74.7	54.8	64.7	107.0 11/40	37.1 17/84	69.9	164.5 1/68	28.9 (b)	206.3
April .. ..	68.2	50.7	59.4	94.8 5/38	34.8 24/88	60.0	152.0 8/61	25.0 23/97	149.9
May .. ..	61.6	46.8	51.2	83.7 7/05	29.0 20/16	53.8	112.6 2/59	21.1 20/16	126.6
June .. ..	56.8	43.9	50.4	72.2 1/05	28.0 11/66	44.2	129.0 11/61	19.9 30/29	102.9
July .. ..	55.7	41.9	48.8	69.3 22/26	27.0 21/69	42.3	125.8 27/80	20.5 12/03	116.6
August .. ..	58.7	43.4	51.1	77.0 20/85	28.3 11/63	48.7	137.4 29/69	21.3 14/02	142.5
September .. ..	62.8	45.0	54.2	88.6 28/28	31.0 3/40	57.6	142.1 20/67	22.8 8/18	164.6
October .. ..	67.3	48.3	57.8	98.4 24/14	32.1 3/71	66.3	154.3 28/68	24.8 22/18	182.9
November .. ..	71.1	51.3	61.4	105.7 27/91	36.5 2/96	69.2	159.0 29/65	21.6 2/96	189.1
December .. ..	75.4	54.4	64.9	110.7 15/76	40.0 4/70	70.7	170.3 20/69	33.2 1/04	219.3
Year { Averages .. ..	67.4	49.6	58.5	—	—	87.1	—	—	2046.86
Year { Extremes .. ..	—	—	—	114.1 13/1/39	27.0 21/7/69	87.1	178.5 14/1/62	19.9 30/6/29	—

(a) Revised for 27 years 1916-1942 inclusive.

(b) 17/84 and 20/97.

(c) Total for year.

## HUMIDITY, RAINFALL AND FOG.

Month.	Vapour Pres- sure (inches).	Rel. Hum. (%).			Rainfall (inches).						Fog.		
		9 a.m.											
		Mean.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.	Mean No. of Days Fog.			
No. of yrs. over which observations extend.	35	35	35	35	87	87	87	87	84	85			
January .. ..	0.382	58	65	50	1.93	8	6.66	1941	0.01	1932	2.97	9/97	0.1
February .. ..	0.410	62	69	48	1.80	7	7.72	1939	0.03	1870	3.42	26/39	0.3
March .. ..	0.382	64	73	50	2.17	9	7.50	1911	0.14	1931	3.55	5/19	0.8
April .. ..	0.346	72	82	66	2.32	11	6.71	1901	0.00	1923	2.28	22/01	1.8
May .. ..	0.310	79	86	71	2.10	13	5.60	1942	0.14	1934	1.85	7/91	4.2
June .. ..	0.276	83	92	75	2.09	15	4.51	1859	0.73	1877	1.74	21/04	4.9
July .. ..	0.262	82	86	76	1.87	15	7.02	1891	0.57	1902	2.71	12/91	4.8
August .. ..	0.270	76	82	70	1.90	15	4.35	1939	0.48	1903	1.94	26/24	2.5
September .. .	0.287	68	76	60	2.30	14	7.93	1916	0.52	1907	2.62	12/80	0.8
October .. ..	0.303	62	67	52	2.64	13	7.61	1869	0.29	1914	3.00	17/69	0.4
November .. .	0.333	60	69	52	2.26	11	6.71	1916	0.25	1895	2.57	16/76	0.2
December .. .	0.366	59	69	48	2.31	10	7.18	1863	0.11	1904	3.20	1/34	0.2
Year { Totals ..	—	—	—	—	25.69	141	—	—	—	—	—	—	21.0
Year { Averages	0.321	69	—	—	—	—	—	—	—	—	—	—	—
Year { Extremes	—	—	92	48	—	—	7.93	9/1916	0.00	4/1923	3.55	5/3/10	—

## CLIMATOLOGICAL DATA : HOBART, TASMANIA.

LAT. 42° 53' S., LONG. 147° 20' E. HEIGHT ABOVE M.S.L. 177 FT.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.

Month.	Bar. corrected to 32° F. M.S. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind.						Mean Amount of Evaporation (inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m. 3 p.m. and 9 p.m.	No. of Clear Days.
		Anemometer 40 feet above surface.				Prevailing Direction.					
		Mean Speed (miles per hour).	Highest Mean Speed in One Day (miles per hour).	Max. Gust Speed (miles per hour).							
No. of years observations.	58	32	32	58	9 a.m.	3 p.m.	32	35	80	36	
January ..	29.822	8.0	21 30/16	76	N to NW	SE	4.813	0.9	6.0	2.3	
February ..	29.914	7.1	25 4/27	63	N to NW	SE	3.696	1.0	6.0	2.3	
March ..	29.951	6.7	21 13/38	68	N to NW	SE	3.106	1.2	5.9	2.4	
April ..	29.973	6.7	22 27/26	74	N to NW	SE & NW	1.999	0.7	6.2	1.7	
May ..	29.997	6.4	20 20/36	70	N to NW	N to NW	1.382	0.4	6.1	2.3	
June ..	29.968	6.2	24 27/20	61	NNW to NW	N to NW	0.907	0.4	6.1	2.3	
July ..	29.940	6.5	21 19/35	78	NNW to NW	N to NW	0.945	0.4	5.9	2.2	
August ..	29.915	6.8	26 19/26	67	N to NW	N to NW	1.279	0.4	6.0	2.1	
September ..	29.850	8.0	22 26/15	84	N to NW	NW	1.973	0.6	6.1	1.5	
October ..	29.835	8.1	19 8/12	74	N to NW	SE & NW	3.014	0.5	6.4	1.2	
November ..	29.816	8.0	21 18/15	67	N to NW	SE	3.767	0.7	6.4	1.5	
December ..	29.817	7.7	23 1/34	62	N to NW	SE	4.333	0.7	6.4	1.3	
Year {	Totals ..	—	—	—	—	—	31.214	7.9	—	23.1	
	Averages	29.900	7.2	—	—	N to NW	SE	—	—	6.1	—
	Extremes	—	—	26 19/8/26	84	—	—	—	—	—	—

## TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).		Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean.	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
	72	72	72	74	74		53	75	22
No. of yrs. over which observations extend.	72	72	72	74	74	74	53	75	22
January ..	71.0	52.7	61.9	105.0 (a)	40.1 (b)	64.9	160.0 (c)	30.6 19/98	239.5
February ..	71.1	53.2	62.1	104.4 12/99	39.0 20/87	65.4	165.0 24/98	28.3 —/87	199.6
March ..	67.9	50.9	59.4	98.8 5/46	35.2 31/26	63.6	150.0 3/05	27.5 30/02	198.3
April ..	62.6	47.7	55.1	84.0 17/29	33.3 24/88	50.7	142.0 18/93	25.0 —/86	147.6
May ..	57.5	43.9	50.7	77.8 5/21	29.2 20/02	48.6	128.0 (d)	20.0 19/02	141.1
June ..	52.8	41.0	46.9	69.2 1/07	29.3 12/13	39.9	122.0 12/94	21.0 6/87	119.2
July ..	52.1	39.6	45.9	66.1 14/34	27.7 11/95	38.4	121.0 12/93	18.7 16/86	131.7
August ..	55.1	41.1	48.1	71.6 28/14	30.2 6/46	41.4	129.0 —/87	20.1 7/09	158.0
September ..	58.8	43.2	51.0	81.7 23/26	30.0 12/41	51.7	138.0 23/93	18.3 16/26	174.4
October ..	62.6	45.5	54.0	92.0 24/14	32.0 12/89	60.0	156.0 9/93	23.8 (e)	194.7
November ..	65.9	48.3	57.1	98.3 26/37	33.2 5/13	63.1	154.0 19/92	26.1 1/08	218.6
December ..	69.0	51.1	60.0	105.2 30/97	38.0 13/00	67.2	161.5 10/39	27.2 —/86	222.3
Year { Averages	62.2	46.5	54.4	—	—	—	—	—	214.5 of
Extremes	—	—	—	105.2 30/12/97	27.7 11/7/95	77.5	165.0 24/2/98	18.3 16/9/26	—

(a) 27/49 and 1/00. (b) 9/37 and 11/37. (c) 5/86 and 13/05. (d) —/89 and —/93. (e) 1/86 and —/99. (f) Total for year.

## HUMIDITY, RAINFALL AND FOG.

Month.	Vapour Pressure (inches).	Rel. Hum. (%) at 9 a.m.			Rainfall (inches).				Fog.
		Mean.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.	
		Mean 9 a.m.	Mean.	Mean.	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.	
No. of yrs. over which observations extend.	56	56	56	56	100	99	100	100	21
January ..	0.326	58	72	46	1.84	10	5.91 1893	0.03 1841	2.96 30/16
February ..	0.350	62	77	48	1.51	9	9.15 1854	0.07 1847	4.50 27/54a
March ..	0.328	66	77	52	1.76	10	7.60 1854	0.02 1843	3.27 11/32
April ..	0.299	72	84	58	1.93	12	8.50 1935	0.07 1904	5.02 20/09
May ..	0.269	77	89	65	1.83	13	6.37 1905	0.10 1843	3.22 14/58
June ..	0.238	79	91	68	2.21	14	8.15 1880	0.22 1852	4.11 13/89
July ..	0.228	80	94	72	2.13	14	6.02 1922	0.30 1850	2.51 18/22
August ..	0.237	75	92	61	1.85	14	10.16 1858	0.23 1854	4.35 12/58
September ..	0.249	67	85	58	2.07	16	7.14 1844	0.39 1847	2.75 18/44
October ..	0.269	63	73	51	2.29	15	6.67 1906	0.26 1850	2.58 4/06
November ..	0.292	59	72	50	2.41	14	8.94 1849	0.16 1868	3.97 7/49
December ..	0.316	58	67	45	2.13	12	9.00 1875	0.11 1842	3.33 5/41
Year { Totals ..	—	—	—	—	23.96	153	—	—	—
Averages	0.280	67	—	—	—	—	—	—	—
Extremes	—	—	94	45	—	—	10.16 8/1858	0.02 3/1843	5.02 20/4/09

(a) Also 4.18 inches on 28/54.

### § 3. Standard Times in Australia.

Prior to 1895 the official time adopted in the several colonies was for most purposes the mean solar time of the capital city of each.

In November, 1892, an intercolonial conference of surveyors was held in Melbourne to consider, among other things, the advantages of introducing the system of standard time. In this system it was proposed to make the initial meridian that of Greenwich, and to change local standard time by whole hours according to the longitude east or west of that of Greenwich. Thus for every difference of 15° in longitude a change of one hour would be required. The minutes and seconds would then be identical everywhere.

To give effect to this proposal it was suggested that Australia should be divided into three zones, the standard times for which should be respectively the mean solar times of the meridians of 120°, 135° and 150° E. longitude, thus giving standard times 8, 9 and 10 hours respectively, ahead of Greenwich time. It was proposed that the 120° zone should comprise Western Australia, that the 135° zone should comprise South Australia and the Northern Territory, and that the 150° zone should comprise Queensland, New South Wales, Victoria and Tasmania.

The matter was also considered by several intercolonial postal conferences, and eventually in 1894 and 1895 legislation was enacted by each of the colonies in accord with the recommendations of the surveyors' conference of 1892.

In 1898 the South Australian legislature amended its earlier provision, and adopted the mean solar time of the meridian 142° 30' E. longitude as the standard time for that colony, thus reducing the difference between the standard time of Adelaide and that of the capitals of the eastern colonies from an hour to half-an-hour, and forfeiting the great advantage of the system, namely, that the minutes and seconds should be identical throughout the world. Particulars concerning these enactments are as follows:—

#### STANDARD TIMES IN AUSTRALIA.

State.		Date when Act came into Operation.		Meridian Selected.	Time Ahead of Greenwich. Hours.
New South Wales	..	1st February, 1895	..	150° E.	10
Victoria	..	1st February, 1895	..	150° E.	10
Queensland	..	1st January, 1895	..	150° E.	10
South Australia	..	1st February, 1895	..	135° E.	9
South Australia	..	1st May, 1899	..	142° 30' E.	9½
Western Australia	..	1st December, 1895	..	120° E.	8
Tasmania	..	1st September, 1895	..	150° E.	10

The standard time in the Australian Capital Territory is the same as in New South Wales, and Northern Territory is the same as in South Australia.

Consequent upon the opening of the Trans-Australian Railway an arrangement has been made by which the change of time between South Australia and Western Australia (namely, 1½ hours) is divided into two changes of 45 minutes each. Going east from Kalgoorlie the first change is made at Rawlinna, 235.18 miles out, where the time is put forward by 45 minutes. The second change of the same amount is made at Tarcoola, 794.05 miles out. Thenceforward South Australian standard time is kept. The advantage of standard time has thus been still further sacrificed, as there is not now even a whole half-hour difference; the essential idea of standard zone time has to this extent, therefore, been abandoned. The State Observatories at Sydney, Melbourne, Adelaide and Perth derive time by astronomical observation. By arrangement with the Australian Broadcasting Commission observatory time-signals are broadcast in the several States at intervals during the day. In addition, the Amalgamated Wireless (Australasia) Ltd. re-broadcasts the daily time-signals of certain oversea stations.



## CHAPTER III.

### GENERAL GOVERNMENT.

#### § 1. Scheme of Parliamentary Government.

1. **General.**—A brief account of the general legislative powers of the Commonwealth and States is given in preceding issues of the Official Year Book (see No. 13, pp. 927-95†, and No. 22, p. 64).

2. **Powers and Functions of the Governor-General and of the State Governors.**—A detailed statement of the powers and functions of the Governor-General and of the State Governors appears in preceding issues of the Official Year Book (see No. 18, pp. 78-80).

3. **Governor-General and State Governors.**—The Prime Minister announced in the Commonwealth Parliament that on the 12th November, 1943, he had received a message from the Private Secretary to the King announcing that the King, on the recommendation of the Commonwealth Government, had been graciously pleased to approve the appointment of His Royal Highness the Duke of Gloucester, K.G., P.C., K.T., K.P., G.C.M.G., G.C.V.O., as Governor-General in succession to General the Right Honorable Lord Gowrie, V.C., P.C., G.C.M.G., C.B., D.S.O., whose term of office was further extended for six months as from 22nd January, 1944.

Lord Gowrie assumed office on the 23rd January, 1936. He had previously been Governor of South Australia, 1928-1934 and Governor of New South Wales, 1935-1936. The following is a list of the Governors of the various States of Australia :—

New South Wales ..	Captain the Rt. Hon. Lord Wakehurst, K.C.M.G.
Victoria ..	Major-General Sir Winston Joseph Dugan, K.C.M.G., C.B., D.S.O.
Queensland ..	Colonel the Rt. Hon. Sir Leslie Orme Wilson, G.C.S.I., G.C.M.G., G.C.I.E., D.S.O.
South Australia ..	Sir Charles Malcolm Barolay-Harvey, K.C.M.G.*
Western Australia ..	Lieut.-Governor—The Hon. Sir James Mitchell, K.C.M.G.
Tasmania ..	Sir Ernest Clark, G.C.M.G., K.C.B., C.B.E.

4. **The Cabinet and Executive Government.**—(i) *General.* In both the Commonwealth and the State Legislatures the forms of government have been founded on their prototypes in the Imperial Government, and the relations established between the Ministry and the representatives of the people are in accordance with those prevailing in Great Britain. The executive powers in the Commonwealth are vested in the Governor-General in Council, and in the State Governments in the Governor in Council. So far as the Commonwealth Government is concerned, Federal Executive Councillors on leaving office retain the title "Honorable", and are known as "Executive Councillors not under summons".

(ii) *The Executive Council.* This body is composed of the Governor-General (or Governor) and the Ministers of State holding office for the time being. The meetings are official in character. They are presided over by the Governor-General (or Governor). In his absence the Vice-President or senior Minister presides. At these meetings the decisions of Cabinet, where necessary, are made effective, and regulations, etc., are given the force of law.

(iii) *The Appointment of Ministers and of Executive Councillors.* Although it is technically possible for the Governor-General (or Governor), to make and unmake cabinets at his pleasure, under all ordinary circumstances his apparent liberty in choosing his Executive Council is virtually restricted by the operation of constitutional machinery. When a Ministry is defeated in Parliament or at the polls, the procedure both in the Commonwealth and the State Parliaments generally, though not invariably, follows that prevailing in the Imperial Parliament. The customary procedure in connexion with the resignation or acceptance of office by a Ministry is described fully in previous issues of the Official Year Book (see No. 6, p. 942). It is necessary to add that subsequent amending legislation has obviated the necessity of responsible Ministers vacating their seats on appointment to office.

\* To 26th April, 1944.

(iv) *Ministers in Upper and Lower Houses.* The following table shows the number of Ministers with seats in the Upper or Lower Houses of each Parliament in June, 1944 :—

**AUSTRALIAN PARLIAMENTS : MINISTERS IN UPPER OR LOWER HOUSES, JUNE, 1944.**

Ministers with Seats in—	C'wealth.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
The Upper House ..	5	2	4	(a)	2	2	1	16
The Lower House ..	14	13	8	10	4	7	8	64
<b>Total</b> ..	<b>19</b>	<b>15</b>	<b>12</b>	<b>10</b>	<b>6</b>	<b>9</b>	<b>9</b>	<b>80</b>

(a) Abolished in 1922.

(v) *The Cabinet.* (a) *General.* The meetings of this body are private and deliberative. Only the actual Ministers of the day are present. The members of the Cabinet, being the leaders of the party in power in Parliament, control the trend of legislation, and must retain the confidence of the people and also of the Governor-General (or Governor), to whom they act as an advising body. They also in effect wield, by virtue of their seats on the Executive Council, the whole executive force of the community. In summoning, proroguing, or dissolving Parliament, the Governor-General (or Governor) is usually guided by the advice tendered him by the Cabinet, though legally in no way bound to accept such advice.

(b) *Commonwealth Ministers of State.* A statement showing the names of Ministers of State who have held office from the inauguration of the Commonwealth Government to 1925 will be found in Official Year Book No. 18, pp. 82 and 83. The names of the present Ministers will be found on page 73.

(c) *State Ministries.* A list of the members of the Ministry in each State in June, 1944, will be found in § 3 of this Chapter.

5. **Number and Salary of Members of the Legislatures.**—The following table shows the number and annual salary of members in each of the legislative chambers in June, 1943 :—

**MEMBERS OF COMMONWEALTH AND STATE PARLIAMENTS, AND ANNUAL SALARIES, JUNE, 1944.**

Members in—	C'wealth.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
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**NUMBER OF MEMBERS.**

Upper House ..	36	60	34	(a)	20	30	18	198
Lower House ..	75	90	65	62	39	50	30	411
<b>Total</b> ..	<b>111</b>	<b>150</b>	<b>99</b>	<b>62</b>	<b>59</b>	<b>80</b>	<b>48</b>	<b>609</b>

**ANNUAL SALARY.**

	£	£	£	£	£	£	£	
Upper House ..	1,000	..	200	(a)	400	600	(b)370-500	..
Lower House ..	1,000	875	500	650	400	600	(b)400-500	..

(a) Abolished in 1922.

(b) According to area of electorate and distance from the Capital.

The use of the expressions "Upper House" and "Lower House" in the statement above, though not justified constitutionally, is convenient, inasmuch as the legislative chambers are known by different names in the Commonwealth and in some of the States.

6. **Enactments of the Parliament.**—In the Commonwealth, all laws are enacted in the name of the Sovereign, the Senate, and the House of Representatives. The subjects with respect to which the Commonwealth Parliament is empowered to make laws are enumerated in the Constitution Act. In the States, laws are enacted in the name of the Sovereign by and with the consent of the Legislative Council (except in

(Queensland) and Legislative Assembly or House of Assembly. The Governor-General or the State Governor acts as Viceroy as regards giving the Royal Assent to or vetoing Bills passed by the Legislatures, or reserving them for the special consideration of the Sovereign. In the States, the Councils and Assemblies are empowered generally, subject to the Commonwealth Constitution, to make laws in and for their respective States, in all cases whatsoever. Subject to certain limitations, they may alter, repeal, or vary their Constitution. Where a law of a State is inconsistent with a law of the Commonwealth the latter prevails, and the former is, to the extent of the inconsistency, invalid.

## § 2. Parliaments and Elections.

1. **Qualifications for Membership and for Franchise.**—The conspectus in § 4 of "General Government" in Official Year Book No. 13 contains particulars, as in 1920, relating to the legislative chambers in the Commonwealth and State Parliaments, and shows concisely the qualifications necessary for membership and for the franchise in each House. (These are, in the main, applicable in 1943, but it must be remembered that Queensland abolished the Upper House in 1922.) It has further to be remembered that in 1925 the Commonwealth Parliament passed an Act removing the disqualification on racial grounds from (a) natives of British India and (b) persons who have become naturalized. Disqualification of persons otherwise eligible, either as members or voters, is generally on the usual grounds of being of unsound mind or attainted of treason, being convicted of certain offences, and, as regards membership, on the grounds of holding a place of profit under the Crown, being pecuniarily interested in a Government contract except as a member of an incorporated company of more than twenty-five persons, or being an undischarged bankrupt.

2. **The Commonwealth Government.**—The Senate consists of 36 members, six being returned by each of the original federating States. Members of this Chamber are elected for the term of six years, but by a provision in the Constitution half the members retire at the end of every third year, although they are eligible for re-election. In accordance with the Constitution, the total numbers of members of the House of Representatives must be as nearly as possible double that of the Senate. In the House of Representatives the States are represented on a population basis, and the numbers in December, 1943, were as follows:—New South Wales, 28; Victoria, 20; Queensland, 10; South Australia, 6; Western Australia, 5; Tasmania, 5; Northern Territory, 1—total, 75. The member representing the Northern Territory may join in the debates but is not entitled to vote, except on a motion for the disallowance of any ordinance of the Territory or on any amendment of any such motion. The Constitution provides for a minimum of five members for each original State. Members of the House of Representatives are elected for the duration of the Parliament, which is limited to three years. In elections for Senators, the whole State constitutes the electorate. For the purpose of elections for the House of Representatives, the State is divided into single electorates corresponding in number with the number of members to which the State is entitled. In both Houses members are elected by universal adult suffrage. Further information regarding the Senate and the House of Representatives is given in earlier issues of the Official Year Book.

3. **Commonwealth Elections.**—There have been sixteen complete Parliaments since the inauguration of Federation. The fifth Parliament, which was opened on 9th July, 1913, was dissolved on 30th July, 1914, in somewhat unusual circumstances. Under Section 57 of the Constitution, it is provided that, should the Senate fail to pass, or pass with amendments, any proposed law previously passed by the House of Representatives, and should the latter House, after an interval of three months, again pass the proposed law, with or without the amendments of the Senate, and the Senate for a second time reject it or pass it with amendments to which the lower House will not agree, then the Governor-General may dissolve the two Houses simultaneously. For the first time in the history of the Commonwealth this deadlock between the Senate and the House of Representatives occurred in the second session of the fifth Parliament, and, in accordance



with the section of the Constitution referred to above, both Houses were dissolved by the Governor-General. Until 1927 the Parliament met at Melbourne: it now meets at Canberra, the first meeting at Parliament House, Canberra, being opened by H.R.H. the Duke of York, on 9th May, 1927. The first session of the seventeenth Parliament opened on 23rd September, 1943. Particulars regarding Commonwealth elections since 1929 are shown in the following table:—

## COMMONWEALTH ELECTIONS.

Date.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
<b>THE SENATE.</b>									
12.10.1929	1,773,014	1,769,936	3,542,950	(a)	(a)	(a)	..	..	..
19.12.1931	1,827,079	1,822,875	3,649,954	1,741,163	1,727,140	3,468,303	95.30	94.75	95.02
15.9.1934	1,954,339	1,948,338	3,902,677	1,862,749	1,845,829	3,708,578	95.31	94.74	95.03
23.10.1937	2,043,212	2,036,826	4,080,038	1,963,979	1,957,358	3,921,337	96.12	96.10	96.11
21.9.1940	2,113,169	2,126,177	4,239,346	1,989,381	2,027,422	4,016,803	94.14	95.36	94.75
21.8.1943	2,164,648	2,301,089	4,466,637	2,132,225b	2,169,430b	4,301,655b	98.50b	94.24b	96.31b

(a) No election.

(b) Includes members of Forces not enrolled.

## THE HOUSE OF REPRESENTATIVES.

## (CONTESTED ELECTORATES.)

12.10.1929	1,557,525	1,560,505	3,118,030	1,479,100	1,478,147	2,957,547	94.96	94.74	94.85
19.12.1931	1,724,730	1,733,343	3,458,073	1,043,004	1,042,870	3,286,474	95.30	94.78	95.04
15.9.1934	1,930,418	1,934,021	3,864,439	1,843,949	1,833,774	3,677,723	95.52	94.82	95.17
23.10.1937	1,928,786	1,919,234	3,848,020	1,851,770	1,844,499	3,696,269	96.16	96.11	96.13
21.9.1940	2,087,003	2,109,443	4,196,446	1,966,744	2,012,265	3,979,009	94.24	95.30	94.82
21.8.1943	2,134,547	2,272,960	4,407,507	2,103,636a	2,141,733a	4,245,369a	98.55a	94.23a	96.32a

(a) Includes members of forces not enrolled.

The percentage of electors who exercised the franchise at each election rose from 53.04 for the Senate and 55.69 for the House of Representatives in 1901 to 77.69 and 78.30 respectively in 1917. The next election in 1919 showed a considerable falling off, and in 1922 the decrease was still more marked, the respective percentages for that year being 57.95 and 59.36, or very little more than those for 1901. Compulsory voting was introduced prior to the election in 1925, and an exceedingly heavy vote (over 91 per cent.) was cast in that year. This high percentage has been exceeded appreciably at subsequent elections, increasing in 1943 to 96.3 per cent. for both Houses.

For the first time two women were elected to the Commonwealth Parliament in 1943. One woman was elected to the Senate and the other to the House of Representatives.

4. **Commonwealth Referenda.**—(i) *General.* According to Section 128 of the Constitution, any proposed law for the alteration of the Constitution must, in addition to being passed by an absolute majority of each House of Parliament, be submitted to a referendum of the electors in each State, and must further be approved by a majority of the States and of the electors who voted before it can be presented for Royal Assent. So far eighteen proposals have been submitted to referenda and the consent of the electors has been received in three cases only, the first in relation to the election of Senators in 1906, and the other two in respect of State Debts—one in 1910 and the other in 1928. Details of the various referenda and the voting thereon are shown in the following paragraphs:—

(ii) *Senate Elections Referendum, 1906.* A referendum was held on the 12th December, 1906, at which the question of altering from January to July the date at which the term of service of a senator begins, and other details connected with the election of senators, were submitted for decision by the electors. The number who voted in favour of the amendment was 774,011 and of those not in favour 162,470; the amendment was therefore carried. Only 50.17 per cent. of the electors voted.

(iii) *Finance and State Debts Referendum*. Simultaneously with the general election of the 13th April, 1910, the electors were asked to decide regarding the alteration of the Constitution on two points, viz. :—(a) An alteration of the financial arrangements between the Commonwealth and the States; and (b) Giving the Commonwealth power to take over the debts of the States, whenever incurred. The former proposal was rejected, 645,514 electors having voted in favour, and 670,838 not in favour, while the latter proposal was accepted by 715,053 votes to 586,271 votes. Of the voters on the roll, 62.16 per cent. voted.

(iv) *Legislative Powers and Monopolies Referendum, 1911*. The object of the proposed law submitted to this referendum was to give the Commonwealth Parliament "legislative power" to deal with the following matters :—(a) Trade and Commerce, without any limitations, instead of "Trade and Commerce with other countries, and among the States" only; (b) The control and regulation of corporations of all kinds (except those formed not for the acquisition of gain). At present only "Foreign corporations and trading and financial corporations formed within the limits of the Commonwealth" come under the jurisdiction of the Federal Parliament; (c) Labour and employment, including wages and conditions of labour and the settlement of industrial disputes generally, including disputes in relation to employment on State railways; and (d) Combinations and monopolies in relation to the production, manufacture, or supply of goods or services.

The referendum was held on the 26th April, 1911, and the number of votes cast in favour of the proposed law was 483,356, and against it 742,704, the majority against being 259,348. The percentage of electors who cast effective votes was 52.36, and the proposal was rejected in every State except Western Australia.

Under the second proposed law relating to "Monopolies," it was proposed to insert in the Constitution the following sub-section :—"When each House of Parliament, in the same session, has by resolution declared that the industry or business of producing, manufacturing, or supplying goods, or of supplying any specified services, is the subject of any monopoly, the Parliament shall have power to make laws for carrying on the industry or business by or under the control of the Commonwealth, and acquiring for that purpose on just terms any property used in connexion with the industry or business." The voting on this question was held simultaneously with that on the preceding proposal, and the proposed law was rejected, 488,668 voters casting their votes in favour, and 736,392 against, the majority against being 248,264. Of the electors on the roll, 52.34 per cent. voted effectively, and the only State which voted in favour of the law was Western Australia.

(v) *Legislative Powers and Monopolies Referendum, 1913*. On the 31st May, 1913, the same proposed alterations were again submitted to the people as five distinct laws, with an additional one whereby the conditions of employment and the settlement of disputes relating thereto in the several State railway services might be brought within the jurisdiction of the Commonwealth. All six proposed laws were rejected. The following table shows the numbers of votes cast for and against each proposed law :—

COMMONWEALTH REFERENDA, 1913.—RESULTS OF VOTING.

Nature of Proposal					Votes in Favour.	Votes Not in Favour.
Trade and Commerce	..	..	..	..	958,419	982,615
Corporations	..	..	..	..	960,711	986,824
Industrial Matters	..	..	..	..	961,607	987,611
Railway Disputes	..	..	..	..	956,358	990,046
Trusts	..	..	..	..	967,331	975,943
Nationalization of Monopolies	..	..	..	..	917,165	941,947

The percentage of electors who-voted was nearly 74, and the States of Queensland, South Australia and Western Australia were in favour of the proposals, while the other three States were not in favour.

(vi) *Legislative Powers and Nationalization of Monopolies Referendum, 1919.* On the 19th December, 1919, proposals were submitted to a referendum of the electors for the alteration of the Constitution in relation to the extension of the legislative powers of the Commonwealth in regard to industrial disputes and to the nationalization of monopolies. In each case the majority of voters was not in favour of the proposed alteration. For the increase of legislative powers, 911,357 votes were cast in favour, and 924,160 against, and for the nationalization of monopolies, the number of votes in favour was 813,880, and not in favour 859,451; therefore both proposals were rejected, the former by 12,803 votes and the latter by 45,571 votes. The percentage of electors who voted on the former question was 64.41 and on the latter 58.72, although ballot-papers were issued to 71.33 of the voters enrolled. The States voting in favour of both proposals were Victoria, Queensland and Western Australia.

(vii) *Industry and Commerce and Essential Services Referendum, 1926.* On 4th September, 1926, a referendum was held in relation to proposed laws entitled respectively "Industry and Commerce" and "Essential Services". The result of the voting was: Industry and Commerce, votes in favour, 1,247,088; votes not in favour, 1,619,655. Essential Services, votes in favour, 1,195,502; votes not in favour, 1,597,793. Both proposed laws were therefore rejected.

(viii) *States Debts Referendum, 1928.* A referendum was taken on 17th November, 1928, in respect of a proposed law entitled "State Debts 1928" and a majority of votes was cast in each State in favour of the proposal, the voting for the Commonwealth being as follows: in favour, 2,237,391; not in favour, 773,852.

(ix) *Aviation and Marketing Referendum, 1937.* On 6th March, 1937, proposals were submitted to the electors for the alteration of the Constitution in relation to "Aviation" and "Marketing". The result of the voting on "Aviation" was, votes in favour 1,924,946; votes not in favour 1,669,062. The proposal was negatived as two States, Victoria and Queensland, only were in favour of it.

The votes on "Marketing" were: in favour 1,259,808; not in favour 2,214,338. All States were opposed to alteration.

5. *Convention of Representatives of Commonwealth and State Parliaments to consider the reference of powers by the States to the Parliament of the Commonwealth.*—

(i) *General.* The Convention met at Canberra from 24th November to 2nd December, 1942, and adopted a resolution that adequate powers to make laws in relation to post-war reconstruction should be referred by the States to the Parliament of the Commonwealth for a period ending at the expiration of five years after the war, and finally approved of the following draft bill:—

A Bill for an Act to refer certain matters to the Parliament of the Commonwealth until the expiration of five years after Australia ceases to be engaged in hostilities in the present war.

#### PREAMBLE.

Whereas it is enacted by the Constitution of the Commonwealth of Australia that the Parliament of the Commonwealth shall subject to the Constitution have power to make laws for the peace, order and good government of the Commonwealth with respect to matters referred to the Parliament of the Commonwealth by the Parliament or Parliaments of any State or States, but so that the law shall extend only to States by whose Parliaments the matter is referred, or which afterwards adopt the law:

And whereas at a Convention of representatives of the Commonwealth Government and of His Majesty's Opposition in the Parliament of the Commonwealth, and the Premiers and Leaders of the Opposition in the several States, which was convened to meet at Canberra on the twenty-fourth day of November, One thousand nine hundred and forty-two, it was unanimously resolved that adequate powers to make laws in relation to post-war reconstruction should be referred to the Parliament of the Commonwealth by the Parliaments of the States:



And whereas it was further resolved that the reference should be for a period ending at the expiration of five years after Australia ceases to be engaged in hostilities in the present war :

And whereas it was also resolved that it was desirable that the reference should not be revoked during that period :

And whereas the Premiers of the several States have agreed to do their utmost to secure the passage through their respective Parliaments, as early as possible, of a Bill in this form, and in any event to introduce the Bill before the thirty-first day of January, One thousand nine hundred and forty-three :

And whereas it was also agreed that in the execution of laws made by the Parliament of the Commonwealth with respect to matters referred to it by section two of this Act the Commonwealth should, so far as might be reasonably practicable, avail itself of the assistance of the States and their officers, authorities and instrumentalities, and, with the consent of the Governor in Council, of any authority constituted under a law of a State :

Be it therefore enacted by . . . . .

SHORT TITLE.

1. This Act may be cited as the *Commonwealth Powers Act 1942*.

REFERENCE OF MATTERS TO PARLIAMENT OF COMMONWEALTH.

2. The following matters are hereby referred to the Parliament of the Commonwealth, that is to say :—

- (a) the reinstatement and advancement of those who have been members of the fighting services of the Commonwealth during the war and the advancement of the dependants of those members who have died or been disabled as a consequence of the war ;
- (b) employment and unemployment ;
- (c) organized marketing of commodities ;
- (d) uniform company legislation ;
- (e) trusts, combines and monopolies ;
- (f) profiteering and prices (but not including prices or rates charged by State or semi-governmental or local governing bodies for goods or services) ;
- (g) the production (other than primary production) and distribution of goods, and, with the consent of the Governor in Council, primary production, but so that no law made under this paragraph shall discriminate between States or parts of States ;
- (h) the control of overseas exchange and overseas investment ; and the regulation of the raising of money in accordance with such plans as are approved by a majority of members of the Australian Loan Council ;
- (i) air transport ;
- (j) uniformity of railway gauges ;
- (k) national works, but so that the consent of the Governor in Council shall be obtained in each case before the work is undertaken and that the work shall be carried out in co-operation with the State ;
- (l) national health in co-operation with the State ;
- (m) family allowances ; and
- (n) the people of the aboriginal race.

ACT NOT TO BE REPEALED OR AMENDED WITHOUT APPROVAL OF ELECTORS.

- 3.—(1.) This Act shall not be repealed or amended except in the manner provided in this section.

(2.) A Bill for repealing or amending this Act shall not be presented to the Governor for His Majesty's assent until the Bill has been approved by the electors in accordance with this section.

(3.) On a day to be appointed by the Governor-in-Council, but not sooner than three months after the passage of the Bill through both Houses of the Legislature, the Bill shall be submitted to the electors qualified to vote for the election of members of the Legislative Assembly.

(4.) When the Bill is submitted to the electors, the vote shall be taken in such manner as the Legislature provides.

(5.) If a majority of the electors voting approve the Bill, it shall be presented to the Governor for His Majesty's assent.

#### DURATION OF ACT.

4. This Act, and the reference made by this Act, shall commence on the date upon which it is assented to, and shall continue in force for a period ending at the expiration of five years after Australia ceases to be engaged in hostilities in the present war; and no law made by the Parliament of the Commonwealth with respect to matters referred to it by this Act shall continue to have any force or effect, by virtue of this Act or the reference made by this Act, after the expiration of that period.

(ii) *Introduction of Powers Bill in State Parliaments.* The Powers Bill was introduced in the Parliament of each State but was passed in the agreed form in only two States, viz., New South Wales and Queensland. The Victorian Parliament did pass the Bill in practically the agreed form, but attached a condition to it suspending its operation until all the other States had passed identical measures. The Parliaments of South Australia and Western Australia passed the Bill, but vital amendments were made to the agreed list of powers. In Tasmania, despite repeated requests by the Government, the Legislative Council refused to pass the Powers Bill.

6. **The Constitution Alteration (Post-war Reconstruction and Democratic Rights) Bill 1944.**—(i) *General.* As the attempt to obtain the approval of all the State Parliaments to the Powers Bill agreed to at the Canberra Convention failed, the Commonwealth Government decided to submit the Bill to a Referendum in accordance with Section 128 of the Commonwealth Constitution. (See *supra*, p. 25.) The Bill is in substance similar to that agreed to at the Convention but contains also certain declarations regarding freedom of speech and expression and freedom of religion. The Bill also contains a provision requiring notice of regulations of a legislative character made under the proposed powers being given to each senator and each member of the House of Representatives.

The Bill was duly passed by an absolute majority of the members of both Houses of the Commonwealth Parliament and was submitted to the people at a Referendum on 19th August, 1944. Results may be found in the Appendix.

(ii) *Details of Proposed Law.* The terms of the proposed law are as follows:—

A Bill for an Act to alter the Constitution for a limited period by empowering the Parliament to make Laws in relation to Post-war Reconstruction, and by including Provisions to safeguard Freedom of Speech and Expression and Freedom of Religion.

#### PREAMBLE.

Be it enacted by the King's Most Excellent Majesty, the Senate, and the House of Representatives of the Commonwealth of Australia, with the approval of the electors, as required by the Constitution, as follows:—

#### SHORT TITLE.

1. This Act may be cited as *Constitution Alteration (Post-war Reconstruction and Democratic Rights) 1944.*

2. The Constitution is altered by inserting, after Chapter I., the following Chapter and section :—

“ CHAPTER IA.—TEMPORARY PROVISIONS.

POWER TO MAKE LAWS, FOR A LIMITED PERIOD, WITH RESPECT TO CERTAIN MATTERS.

“ 60A.—(1.) The Parliament shall, subject to this Constitution, have power to make laws for the peace, order and good government of the Commonwealth with respect to—

- (i) the reinstatement and advancement of those who have been members of the fighting services of the Commonwealth during any war, and the advancement of the dependants of those members who have died or been disabled as a consequence of any war ;
- (ii) employment and unemployment ;
- (iii) organized marketing of commodities ;
- (iv) companies, but so that any such law shall be uniform throughout the Commonwealth ;
- (v) trusts, combines and monopolies ;
- (vi) profiteering and prices (but not including prices or rates charged by State or semi-governmental or local governing bodies for goods or services) ;
- (vii) the production and distribution of goods, but so that—
  - (a) no law made under this paragraph with respect to primary production shall have effect in a State until approved by the Governor in Council of that State ; and
  - (b) no law made under this paragraph shall discriminate between States or parts of States ;
- (viii) the control of overseas exchange and overseas investment ; and the regulation of the raising of money in accordance with such plans as are approved by a majority of members of the Australian Loan Council ;
- (ix) air transport ;
- (x) uniformity of railway gauges ;
- (xi) national works, but so that, before any such work is undertaken in a State, the consent of the Governor in Council of that State shall be obtained and so that any such work so undertaken shall be carried out in co-operation with the State ;
- (xii) national health in co-operation with the States or any of them ;
- (xiii) family allowances ; and
- (xiv) the people of the aboriginal race.

“ (2.) Neither the Commonwealth nor a State may make any law for abridging the freedom of speech or of expression.

“ (3.) Section one hundred and sixteen of this Constitution shall apply to and in relation to every State in like manner as it applies to and in relation to the Commonwealth.

“ (4.) A regulation of a legislative character under the authority of any law made by the Parliament in the exercise of any power conferred by sub-section (1.) of this section—

- (a) shall, subject to this section, take effect on the expiration of the fourteenth day after its contents have been notified in the manner



provided by the Parliament to each senator and each member of the House of Representatives or on such later date as is specified in the regulation ;

- (b) shall not take effect if, within fourteen days after its contents have been so notified, either House of the Parliament passes a resolution disapproving of the regulation ; and
- (c) shall take effect on the date of its making or on such later date as is specified in the regulation, if the Governor-General in Council declares on specified grounds that the making of the regulation is urgently required.

“(5.) This section shall continue in force until the expiration of a period of five years from the date upon which Australia ceases to be engaged in hostilities in the present war, and shall then cease to have effect, and no law made by the Parliament with respect to any matter specified in sub-section (1.) of this section shall continue to have any force or effect by virtue of this section after this section has ceased to have effect.”

7. The Parliament of New South Wales.—(i) *Constitution.* The Parliament of New South Wales consists of two Chambers, the Legislative Assembly and the Legislative Council. The Assembly consists of ninety members, elected in single-seat electoral districts, who hold their seats during the existence of the Parliament to which they are elected. The duration of Parliament is limited to three years. Until 1934 the Council was a nominee Chamber, consisting of a variable number of members appointed for life without a remuneration, but as from 23rd April, 1934, the Council was reconstituted and became a House of sixty members to serve without remuneration for a term of twelve years, with one-quarter of the members retiring every third year. The electorate comprises members of both Chambers, who vote as a single electoral body at simultaneous sittings of both Chambers. At the first elections in 1933, four groups of fifteen members were elected to serve respectively twelve years, nine years, six years, and three years. Any person resident for at least three years in Australia and entitled to vote at the election of members of the Legislative Assembly is eligible for election as a member of the Council, if nominated by two electors, an elector being a member of either of the two Houses for the time being.

(ii) *Particulars of Elections.* Since the introduction of responsible government in New South Wales there have been thirty-three complete Parliaments, the first of which opened on 22nd May, 1856, and was dissolved on 19th December, 1857, while the thirty-third was dissolved on 13th April, 1944. The thirty-fourth Parliament opened on 22nd June, 1944. The elections of 1920, 1922 and 1925 were contested on the principle of proportional representation, but a reversion to the system of single seats and preferential voting was made at the later appeals to the people. Particulars of voting at elections from 1927 to 1941 are given below :—

#### NEW SOUTH WALES LEGISLATIVE ASSEMBLY ELECTIONS.

Year.	Electors Qualified to Vote.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1927	714,880	694,607	1,409,493	591,820	558,957	1,150,777	83.79	81.25	82.54
1930	724,471	716,314	1,440,785	682,747	673,676	1,356,423	95.09	94.79	94.94
1932	739,009	725,999	1,465,008	690,094	676,993	1,367,087	96.42	96.37	96.39
1935	769,220	759,493	1,528,713	654,383	640,369	1,294,752	96.09	95.60	95.85
1938	803,517	804,316	1,607,833	608,727	606,767	1,215,494	96.15	95.41	95.78
1941	834,752	850,029	1,684,781	698,100	727,652	1,425,752	90.99	94.03	92.52

The principle of one elector one vote was adopted in 1894, and that of compulsory enrolment in 1921. Compulsory voting was introduced at the 1930 election, and, as the table above shows, the percentage of electors who voted in contested electorates rose to over 96 in 1932, but declined to 93 in 1941.

The franchise was extended to women (Women's Franchise Act) in 1902, and was exercised for the first time in 1904.

8. The Parliament of Victoria.—(i) *Constitution.* Both of the Victorian legislative Chambers are elective bodies, but there is a considerable difference in the number of members of each House, as well as in the qualifications necessary for members and electors. The number of members in the Upper House is thirty-four, and in the Lower House, sixty-five. In the Legislative Council the tenure of the seat is for six years, but one member for each of the seventeen provinces retires every third year. Members of the Legislative Assembly are elected for the duration of Parliament, which is limited to three years. Single voting is observed in elections held for either House, plurality of voting having been abolished for the Legislative Assembly in 1899 and for the Legislative Council in 1937; for the latter House, however, it is still possible for an elector to be enrolled for more than one province, and such elector may select the province for which he desires to record his vote. A preferential system of voting (see Official Year Book No. 6, p. 1182) was adopted for the first time in Victoria at the election held in November, 1911. Compulsory voting was first observed at elections for the Legislative Assembly, 1927, and for the Legislative Council, 1937.

(ii) *Particulars of Elections.* Since the introduction of responsible government in Victoria there have been thirty-four complete Parliaments, the first of which opened on 21st November, 1856, and closed on 9th August, 1859, while the thirty-fourth was dissolved on 30th April, 1943. The thirty-fifth Parliament was opened on 29th June, 1943. Particulars of voting at elections during the years 1928 to 1943 are given in the following table :—

### VICTORIAN ELECTIONS.

#### LEGISLATIVE COUNCIL.

Year.			Electors Enrolled	Electors Enrolled in Contested Electorates.	Electors who Voted.	Percentage of Electors who Voted in Contested Electorates.
1928	..	..	444,278	268,164	85,372	31.84
1931	..	..	470,349	239,975	93,244	38.86
1934	..	..	469,395	160,980	47,375	29.43
1937	..	..	447,694	265,194	208,925	78.78
1940	..	..	471,843	235,784	178,666	75.78
1943	..	..	465,637	117,584	83,568	71.07

#### LEGISLATIVE ASSEMBLY.

Year.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1929	496,996	532,174	1,029,170	308,532	330,836	639,368	94.11	93.36	93.72
1932	510,809	544,492	1,055,301	335,512	351,530	687,042	94.60	93.82	94.20
1935	532,619	566,632	1,099,251	415,081	438,389	853,470	95.00	93.82	94.39
1937	550,618	585,978	1,136,596	383,507	413,923	797,430	94.22	93.72	93.96
1940	565,002	597,965	1,162,967	377,644	408,715	786,359	93.65	93.19	93.41
1943	596,595	665,935	1,261,530	392,160	491,519	883,679	81.87	91.57	87.00

The franchise was extended to women by the Adult Suffrage Act 1908, while voting at elections was made compulsory for the Legislative Assembly in 1926 and for the Legislative Council in 1935.

9. **The Parliament of Queensland.**—(i) *Constitution.* As stated previously the Legislative Council in Queensland was abolished in 1922, the date of Royal Assent to the Act being 23rd March, 1922. The Legislative Assembly is composed of sixty-two members, and the State is divided into that number of electoral districts. The Electoral Districts Act of 1931, assented to on 1st October, 1931, provided that from and after the end of the twenty-fifth Parliament (dissolved on 19th April, 1932) the number of members and electoral districts should be reduced from seventy-two to sixty-two. A system of optional preferential voting is in operation. (See Official Year Book No. 6, p. 1183.)

(ii) *Particulars of Elections.* Since the establishment of responsible government in Queensland there have been twenty-nine complete Parliaments, the last of which was dissolved on 23rd February, 1944. Opinions differ regarding the opening date of the first Queensland Parliament. According to the Votes and Proceedings of the Legislative Assembly the House met for the first time on 22nd May, 1860, when the members were sworn and the Speaker elected. The Governor, however, was unable to be present on that date, but he duly attended on 29th May, 1860, and delivered the Opening Address.

At the elections held in May, 1915, the principle of compulsory voting was introduced for the first time in Australia. Of the number of electors enrolled at the 1941 elections, 90.29 per cent. went to the polls. Statistics regarding elections during the years 1929 to 1941 are given below :—

#### QUEENSLAND LEGISLATIVE ASSEMBLY ELECTIONS.

Year.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1929	270,327	239,672	509,999	228,601	209,647	438,248	89.69	91.45	90.52
1932	274,986	250,958	525,944	236,266	220,628	456,894	92.59	93.14	92.86
1935	303,018	272,270	575,288	245,331	225,427	470,758	92.55	92.89	92.71
1938	318,402	288,157	606,559	280,841	258,196	539,037	92.09	92.97	92.51
1941	331,285	303,631	634,916	269,849	259,398	529,247	88.68	92.03	90.29

The election of 1907 was the first State election in Queensland at which women voted, the right being conferred under the Elections Acts Amendment Act 1905.

10. **The Parliament of South Australia.**—(i) *Constitution.* In this State there is a Legislative Council composed of twenty members and a House of Assembly with thirty-nine members, both Chambers being elective. For the Legislative Council the State is divided into five districts, which return four members each, two of whom retire alternately. Thirty-nine districts return one member each to the House of Assembly; prior to 1938 there were forty-six members representing nineteen districts. A system of preferential voting is in operation. Voting was made compulsory by the Electoral Act Amendment Act 1942.



(ii) *Particulars of Elections.* Since the inauguration of responsible government in South Australia there have been thirty complete Parliaments, the first of which was opened on 22nd April, 1857. The thirtieth Parliament was opened on 3rd July, 1941, and was dissolved on 28th February, 1944. The duration of the twenty-eighth Parliament was extended from three to five years by the provisions of the Constitution (Quinquennial Parliament) Act 1933, but this Act was repealed by the Constitution Act Amendment Act (No. 2) 1939, and the three-year term was reverted to. Particulars of voting at the last five elections are given below :—

SOUTH AUSTRALIAN ELECTIONS.

Year.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.

LEGISLATIVE COUNCIL.

1927	100,376	37,395	137,771	46,686	17,742	64,428	67.55	59.91	65.26
1930	(a)	(a)	133,274	(a)	(a)	100,040	(a)	(a)	75.06
1933	(a)	(a)	133,152	(a)	(a)	25,309	(a)	(a)	64.21
1938	92,109	37,026	129,135	67,691	23,474	91,165	73.49	63.40	70.60
1941	(a)	(a)	115,952	(a)	(a)	70,660	(a)	(a)	60.94

(a) Not available.

HOUSE OF ASSEMBLY.

1927	152,997	156,591	309,588	110,127	104,611	214,738	80.64	74.31	77.43
1930	(a)	(a)	325,244	(a)	(a)	222,819	(a)	(a)	71.36
1933	(a)	(a)	338,576	(a)	(a)	182,693	(a)	(a)	59.45
1938	(a)	(a)	364,884	(a)	(a)	223,136	(a)	(a)	63.31
1941	(a)	(a)	378,265	(a)	(a)	171,978	(a)	(a)	50.69

(a) Not available.

South Australia was the first of the States to grant women's suffrage (under the Constitution Amendment Act 1894), the franchise being exercised for the first time at the Legislative Assembly election on 25th April, 1896.

II. The Parliament of Western Australia.—(i) *Constitution.* In this State both Chambers are elective. For the Legislative Council there are thirty members, each of the ten provinces returning three members, one of whom retires biennially. At each biennial election the member elected holds office for a term of six years, and automatically retires at the end of that period. The Legislative Assembly is composed of fifty members, one member being returned by each electoral district. Members of the Legislative Assembly are elected for three years.

(ii) *Particulars of Elections.* Since the establishment of responsible government in Western Australia there have been seventeen complete Parliaments, the first of which was opened on 30th December, 1890, and the eighteenth Parliament was elected on 20th November, 1943. The preferential system of voting in use in Western Australia is described in Official Year Book No. 6, p. 1184. Elections for membership of both Houses which were due to be held early in 1942, were postponed by the Legislative Council

Postponement of Elections Act 1942 and the Legislative Assembly Duration and General Elections Postponement Act 1941. Particulars relating to more recent Assembly and Council elections are given in the tables following :—

### WESTERN AUSTRALIAN ELECTIONS.

Year.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
<b>LEGISLATIVE COUNCIL.</b>									
1932	57,454	19,889	77,343	17,145	5,508	22,653	56.29	48.29	54.16
1934	62,168	22,323	84,491	31,590	10,189	41,779	53.39	47.23	51.75
1936	63,407	21,987	85,394	18,479	6,394	24,873	45.03	40.03	43.62
1938	62,992	23,419	86,411	19,132	6,971	26,103	52.64	45.57	50.54
1940	62,745	23,598	86,343	24,904	8,013	32,917	41.96	35.29	40.11
1944	56,021	23,508	79,529	17,609	5,154	22,763	51.01	45.47	49.58

### LEGISLATIVE ASSEMBLY.

1930	122,576	107,500	230,076	75,206	63,807	139,013	75.44	73.30	74.44
1933	124,776	112,410	237,185	96,210	89,802	186,012	90.23	91.00	90.60
1936	130,065	117,400	247,465	71,734	64,575	136,309	71.95	68.22	70.13
1939	138,240	127,747	265,987	104,228	101,510	205,738	89.01	91.07	90.01
1943	137,100	137,756	274,856	(a)	(a)	118,378	(a)	(a)	136.53

(a) Not available.

(b) Includes members of Forces not enrolled.

Women's suffrage was granted by the Electoral Act of 1899. The first woman member to be elected to an Australian Parliament was returned at the 1921 election in this State. Voting for the Legislative Assembly was made compulsory in December, 1936, the first elections for which the provision was in force being those held on 18th March, 1939.

(iii) *Secession Referendum.* On 8th April, 1933, the people of Western Australia voted overwhelmingly in favour of the State withdrawing from the Federal Commonwealth, the voting being :—In favour, 138,653 ; not in favour, 70,706.

12. *The Parliament of Tasmania.*—(i) *Constitution.* In Tasmania there are two legislative Chambers—the Legislative Council and the House of Assembly, both bodies being elective. The Council consists of eighteen members, elected for six years and returned from fifteen districts, Hobart returning three, Launceston two, and the remaining thirteen districts sending one member each. Three members retire annually, and the Council cannot be dissolved as a whole. There are five House of Assembly districts, corresponding to the Commonwealth electoral divisions, each returning six members, who are elected under a system of proportional representation which first came into force at the 1909 elections (see Official Year Book No. 6, p. 1185). The life of the Assembly was extended from three to five years by the Constitution Act 1936.

In 1924 and again in 1925 the House of Assembly contested, with at least temporary success, the power of the Legislative Council to amend money bills. The matter was settled by the Constitution Act 1926, which provides that all money bills shall originate in the Assembly, that all money votes shall be recommended by the Governor, and that the Council may amend bills other than those for appropriating public moneys or fixing a rate for income or land tax. The Council has no power to insert a provision for the appropriation of money or to impose or increase any burden on the people.

(ii) *Particulars of Elections.* The first Tasmanian Parliament opened on 2nd December, 1856, and closed on 8th May, 1861. There have been twenty-six complete

Parliaments since the inauguration of responsible government. Particulars of the voting at the last five elections for the House of Assembly are given hereunder :—

### TASMANIAN HOUSE OF ASSEMBLY ELECTIONS.

Year.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1928	55,058	56,898	111,956	46,769	44,910	91,679	84.94	78.94	81.90
1931	59,024	59,706	118,730	56,674	56,105	112,779	96.02	93.97	94.99
1934	63,841	63,840	127,681	60,623	59,999	120,622	94.96	93.98	94.47
1937	66,223	65,778	132,001	62,880	61,580	124,460	94.95	93.62	94.29
1941	69,058	70,176	139,234	61,480	65,554	127,034	89.03	93.41	91.24

The present members of the Legislative Council have been elected at various dates and the following particulars are given of the last contested elections in two divisions in 1944 :—Number of electors on the roll, 8,940; number of votes recorded, 7,365; percentage of persons who voted to the number on the roll, 82.38.

The suffrage was granted to women under the Constitution Amendment Act 1903 and compulsory voting came into force on the passing of the Electoral Act in 1928.

## § 3. Administration and Legislation.

1. The Commonwealth Parliaments.—The first Parliament of the Commonwealth was convened by proclamation dated 29th April, 1901, by his Excellency the late Marquis of Linlithgow, then Earl of Hopetoun, Governor-General. It was opened on 9th May, 1901, by H.R.H. the Duke of Cornwall and York, who had been sent to Australia for that purpose by His Majesty the King, the Rt. Hon. Sir Edmund Barton, G.C.M.G., K.C., being Prime Minister.

The following table gives the number and duration of Parliaments since Federation :—

### COMMONWEALTH PARLIAMENTS.

Number of Parliament.			Date of Opening.	Date of Dissolution.
First	..	..	9th May, 1901	23rd November, 1903
Second	..	..	2nd March, 1904	5th November, 1906
Third	..	..	20th February, 1907	19th February, 1910
Fourth	..	..	1st July, 1910	23rd April, 1913
Fifth	..	..	9th July, 1913	30th July, 1914(a)
Sixth	..	..	8th October, 1914	26th March, 1917
Seventh	..	..	14th June, 1917	3rd November, 1919
Eighth	..	..	26th February, 1920	6th November, 1922
Ninth	..	..	28th February, 1923	3rd October, 1925
Tenth	..	..	13th January, 1926	9th October, 1928
Eleventh	..	..	9th February, 1929	16th September, 1929
Twelfth	..	..	20th November, 1929	27th November, 1931
Thirteenth	..	..	17th February, 1932	7th August, 1934
Fourteenth	..	..	23rd October, 1934	21st September, 1937
Fifteenth	..	..	30th November, 1937	27th August, 1940
Sixteenth	..	..	20th November, 1940	7th July, 1943
Seventeenth	..	..	23rd September, 1943	

(a) On this occasion, the Governor-General, acting on the advice of the Ministry, and under Section 57 of the Constitution, granted a dissolution of both the Senate and the House of Representatives, this being the only occasion on which a dissolution of both Houses has occurred.



2. **Governors-General and Ministries.**—The following statements show the names of the several Governors-General, and the Ministries which have directed the administration of the affairs of the Commonwealth since its inception :—

(a) **GOVERNORS-GENERAL.**

- Rt. Hon. EARL OF HOPETOUN (afterwards MARQUIS OF LINLITHGOW), K.T., G.C.M.G., G.C.V.O.  
From 1st January 1901, to 9th January, 1903.
- Rt. Hon. HALLAM, BARON TENNYSON, G.C.M.G. From 17th July, 1902, to 9th January, 1903.  
(Acting).
- Rt. Hon. HALLAM, BARON TENNYSON, G.C.M.G. From 9th January, 1903, to 21st January, 1904.
- Rt. Hon. HENRY STAFFORD, BARON NORTHCOTE, G.C.M.G., G.C.I.E., C.B. From 21st January, 1904, to 9th September, 1908.
- Rt. Hon. WILLIAM HUMBLE, EARL OF DUDLEY, G.C.B., G.C.M.G., G.C.V.O., &c. From 9th September, 1908, to 31st July, 1911.
- Rt. Hon. THOMAS, BARON DENMAN, G.C.M.G., K.C.V.O. From 31st July, 1911, to 18th May, 1914.
- Rt. Hon. SIR RONALD CRAUFURD MUNRO FERGUSON (afterwards VISCOUNT NOVAR OF RAITH), G.C.M.G. From 18th May, 1914, to 6th October, 1920.
- Rt. Hon. HENRY WILLIAM, BARON FORSTER OF LEPE, G.C.M.G. From 6th October, 1920, to 8th October, 1925.
- Rt. Hon. JOHN LAWRENCE, BARON STONEHAVEN, G.C.M.G., D.S.O. From 8th October, 1925, to 22nd January, 1931.
- Lieut.-Colonel the Rt. Hon. ARTHUR HERBERT TENNYSON, BARON SOMERS, K.C.M.G., D.S.O., M.C.  
From 3rd October, 1930, to 22nd January, 1931 (Acting).
- Rt. Hon. SIR ISAAC ALFRED ISAACS, G.C.M.G. From 22nd January, 1931, to 23rd January, 1936.
- General the Rt. Hon. ALEXANDER GORE ARKWRIGHT, BARON GOWRIE, V.C., P.C., G.C.M.G., C.B., D.S.O. From 23rd January, 1936.

(b) **MINISTRIES.**

- (i) BARTON MINISTRY, 1st January, 1901, to 24th September, 1903.
- (ii) DEAKIN MINISTRY, 24th September, 1903, to 27th April, 1904.
- (iii) WATSON MINISTRY, 27th April, to 17th August, 1904.
- (iv) REID-McLEAN MINISTRY, 18th August, 1904, to 5th July, 1905.
- (v) DEAKIN MINISTRY, 5th July, 1905, to 13th November, 1908.
- (vi) FISHER MINISTRY, 13th November, 1908, to 1st June, 1909.
- (vii) DEAKIN MINISTRY, 2nd June, 1909, to 29th April, 1910.
- (viii) FISHER MINISTRY, 29th April, 1910, to 24th June, 1913.
- (ix) COOK MINISTRY, 24th June, 1913, to 17th September, 1914.
- (x) FISHER MINISTRY, 17th September, 1914, to 27th October, 1915.
- (xi) HUGHES MINISTRY, 27th October 1915, to 14th November, 1916.
- (xii) HUGHES MINISTRY, 14th November, 1916, to 17th February, 1917.
- (xiii) HUGHES MINISTRY, 17th February, 1917, to 10th January, 1918.
- (xiv) HUGHES MINISTRY, 10th January, 1918, to 9th February, 1923.
- (xv) BRUCE-PAGE MINISTRY, 9th February, 1923, to 22nd October, 1929.
- (xvi) SOULLIN MINISTRY, 22nd October, 1929, to 6th January, 1932.
- (xvii) LYONS MINISTRY, 6th January, 1932, to 7th November, 1938.
- (xviii) LYONS MINISTRY, 7th November, 1938, to 7th April, 1939.
- (xix) PAGE MINISTRY, 7th April, 1939, to 26th April, 1939.
- (xx) MENZIES MINISTRY, 26th April, 1939, to 14th March, 1940.
- (xxi) MENZIES MINISTRY, 14th March, 1940, to 29th August, 1941.
- (xxii) FADDEN MINISTRY, 29th August, 1941, to 7th October, 1941.
- (xxiii) CURTIN MINISTRY, 7th October, 1941, to 21st September, 1943.
- (xxiv) CURTIN MINISTRY, 21st September 1943.

(c) SECOND CURTIN GOVERNMENT, from 21st September, 1943.

(The State from which each Minister comes is added in brackets.)

DEPARTMENTS.	MINISTERS.
*Prime Minister and Minister for Defence ..	RT. HON. J. CURTIN (W.A.).
*Minister for the Army .. .. .	RT. HON. F. M. FORDE (Qld.).
*Treasurer and Minister for Post-war Reconstruction	HON. J. B. CHIFLEY (N.S.W.).
*Attorney-General and Minister for External Affairs	RT. HON. H. V. EVATT, LL.D., K.C. (N.S.W.).
*Minister for Supply and Shipping ..	HON. J. A. BEASLEY (N.S.W.).
*Minister for the Navy and Minister for Munitions	HON. N. J. O. MAKIN (S.A.).
Minister for Trade and Customs .. ..	SENATOR THE HON. R. V. KEANE (Vic.).
Minister for Labour and National Service ..	HON. E. J. HOLLOWAY (Vic.).
*Minister for Air and Minister for Civil Aviation	HON. A. S. DRAKEFORD (Vic.).
Minister for Commerce and Agriculture ..	HON. W. J. SCULLY (N.S.W.).
Postmaster-General and Vice-President of the Executive Council	SENATOR THE HON. W. P. ASHLEY (N.S.W.).
*Minister for War Organization of Industry ..	HON. J. J. DEDMAN (Vic.).
Minister for the Interior .. .. .	SENATOR THE HON. J. S. COLLINGS (Qld.).
Minister for Transport and Minister for External Territories	HON. E. J. WARD (N.S.W.).
Minister for Health and Minister for Social Services	SENATOR THE HON. J. M. FRASER (W.A.).
Minister for Repatriation and Minister in charge of War Service Homes	HON. C. W. FROST (Tas.).
Minister for Home Security .. .. .	HON. H. P. LAZZARINI (N.S.W.).
Minister for Aircraft Production .. ..	SENATOR THE HON. D. CAMERON (Vic.).
Minister for Information .. .. .	HON. A. A. CALWELL (Vic.).

\* War Cabinet.

3. State Ministries.—The names of the members of the Ministries in each State in June, 1944, are shown in the following statement. The date on which each Ministry was sworn in is stated in parenthesis :—

### STATE MINISTERS, 1944.

#### NEW SOUTH WALES (16th June, 1944).

Premier and Colonial Treasurer— THE HON. W. J. MCKELL.	Secretary for Public Works and Minister for Local Government— THE HON. J. J. CAHILL.
Deputy Premier, Colonial Secretary, Minister for Mines and Minister for National Emergency Services— THE HON. J. M. BADDELEY.	Minister for Health— THE HON. C. A. KELLY.
Minister for Education— THE HON. R. J. HEFFRON.	Minister for Housing— THE HON. J. MCGIRR.
Attorney-General— THE HON. C. E. MARTIN.	Secretary for Lands— THE HON. J. M. TULLY.
Minister for Conservation— THE HON. W. F. DUNN.	Minister for Transport— THE HON. M. O'SULLIVAN.
Minister for Labour and Industry and Minister for Social Welfare— THE HON. HAMILTON KNIGHT.	Minister for Agriculture— THE HON. E. H. GRAHAM.
Minister of Justice and Vice-President of the Executive Council— THE HON. R. R. DOWNING, M.L.C.	Assistant Ministers— THE HON. C. R. EVATT, K.C. THE HON. W. E. DICKSON, M.L.C.

STATE MINISTERS—*continued.*

## VICTORIA (18th September, 1943).

*Premier, Treasurer, and Minister of De-centralization—*

THE HON. A. A. DUNSTAN.

*Minister of Public Instruction and Minister of Labour—*

THE HON. T. T. HOLLWAY.

*President of the Board of Land and Works, Commissioner of Crown Lands and Survey and Minister of Forests—*

THE HON. A. E. LIND.

*Attorney-General, Solicitor-General and Minister of Public Health—*

THE HON. IAN MACFARLAN, K.C.

*Chief Secretary—*

THE HON. H. J. T. HYLAND.

*Minister of Agriculture and a Vice-President of the Board of Land and Works—*

THE HON. N. A. MARTIN.

*Minister of Water Supply, and Minister in Charge of Electrical Undertakings—*

THE HON. J. G. B. McDONALD.

*Commissioner of Public Works, and a Vice-President of the Board of Land and Works—*

THE HON. J. H. LIENHOP, M.L.C.

*Minister of Transport, Minister of Mines, and a Vice-President of the Board of Land and Works—*

THE HON. J. A. KENNEDY, M.L.C.

*Ministers without Portfolios—*

THE HON. T. D. OLDHAM.

THE HON. G. J. TUCKETT, M.L.C.

THE HON. G. L. CHANDLER, M.L.C.

## QUEENSLAND (27th April, 1944).

*Premier and Chief Secretary—*

THE HON. F. A. COOPER.

*Treasurer—*

THE HON. E. M. HANLON,

*Secretary for Health and Home Affairs—*

THE HON. T. A. FOLEY.

*Secretary for Public Works—*

THE HON. H. A. BRUCE.

*Secretary for Public Lands—*

THE HON. A. JONES.

*Attorney-General—*

THE HON. D. A. GLEDSON.

*Secretary for Public Instruction—*

THE HON. J. LARCOMBE.

*Minister for Transport—*

THE HON. E. J. WALSH.

*Secretary for Labour and Employment and*

*Secretary for Mines—*

THE HON. V. C. GAIR.

*Secretary for Agriculture and Stock—*

THE HON. T. L. WILLIAMS.

## SOUTH AUSTRALIA (15th May, 1944).

*Premier, Treasurer, and Minister of Immigration—*

THE HON. T. PLAYFORD.

*Chief Secretary, Minister of Mines, and Minister of Health—*

THE HON. A. L. McEWIN, M.L.C.

*Attorney-General, Minister of Education, and Minister of Industry and Employment—*

THE HON. C. LEMPRIERE ABBOTT, K.C.

*Commissioner of Crown Lands, Minister of Repatriation, and Minister of Irrigation—*

THE HON. R. J. RUDALL, M.L.C.

*Commissioner of Public Works, Minister of Railways, Minister of Marine, and Minister of Local Government—*

THE HON. M. McINTOSH.

*Minister of Agriculture and Minister of Afforestation—*

THE HON. G. F. JENKINS.



STATE MINISTERS—*continued.*

## WESTERN AUSTRALIA (8th December, 1943).

<i>Premier and Treasurer—</i> THE HON. J. C. WILLCOCK.	<i>Chief Secretary and Minister for Police—</i> THE HON. W. H. KITSON, M.L.C.
<i>Minister for Lands and Agriculture—</i> THE HON. F. J. S. WISE.	<i>Minister for Railways and Justice—</i> THE HON. E. NULSEN.
<i>Minister for Works, Water Supplies and Industrial Development—</i> THE HON. A. R. G. HAWKE.	<i>Minister for the North-west and Forests—</i> THE HON. A. A. M. COVERLEY.
<i>Minister for Mines and Health—</i> THE HON. A. H. PANTON.	<i>Minister for Social Services and Education—</i> THE HON. J. T. TONKIN.
	<i>Honorary Minister—</i> THE HON. E. H. GRAY, M.L.C.

## TASMANIA (30th November, 1943).

<i>Premier and Minister for Education—</i> THE HON. R. COSGROVE.	<i>Minister for Agriculture, and Agricultural Bank—</i> THE HON. JOHN L. MADDEN.
<i>Treasurer—</i> THE HON. E. DWYER-GRAY.	<i>Chief Secretary and Minister for Transport—</i> THE HON. C. E. CULLEY.
<i>Attorney-General and Assistant Minister for Education—</i> THE HON. J. McDONALD, M.L.C.	<i>Honorary Ministers—</i> THE HON. W. P. TAYLOR, M.C. ( <i>Minister for Forests</i> ). THE HON. E. R. A. HOWROYD ( <i>Minister for Health</i> ). THE HON. H. T. LANE ( <i>Minister for Mines</i> ).
<i>Minister for Lands and Works—</i> THE HON. E. BROOKER.	

4. *The Course of Legislation.*—The actual legislation by the Commonwealth Parliament up to the end of 1943 is indicated in alphabetical order in "Vol. XLI. of the Acts of the Parliament of the Commonwealth of Australia, passed during 1943, with Tables, Appendix and Indexes." A "Chronological Table of Acts passed from 1901 to 1943, showing how they are affected by subsequent legislation or lapse of time" is also given, and further "A Table of Commonwealth Legislation", for the same period, "in relation to the several provisions of the Constitution", is furnished. Reference should be made to these for complete information. In previous issues of the Official Year Book an analytic table was included showing the nature of Commonwealth legislation in force at the end of the latest year available. A classification of legislation, according to its relation to the several provisions of the Constitution, up to the end of the year 1928 will be found in No. 22, pp. 76-84.

## § 4. Cost of Parliamentary Government.

The following statement shows the cost of parliamentary government in the Commonwealth and in each State, as well as the cost per head of population, for the year ended 30th June, 1943. In order to avoid incorrect conclusions as to the cost of the Governor-General's or Governor's establishment, it may be pointed out that a very large part of the expenditure (with the exception of the item "Governor's salary") under the head of Governor-General or Governor represents official services entirely outside the Governor's personal interest, and carried out at the request of the Government.

## COST OF PARLIAMENTARY GOVERNMENT, 1942-43.

Particulars.	C'wth.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
<b>1. Governor-General or Governor—</b>	£	£	£	£	£	£	£	£
Governor's salary ..	10,000	5,000	5,000	3,000	5,000	(a) 2,000	3,000	33,000
Other salaries ..	2,208	4,794	877	1,798	1,863	950	840	13,330
Other expenses, including maintenance of house and grounds ..	b 17,531	2,753	5,325	(b) 3,133	1,787	2,139	3,204	35,872
Total ..	29,739	12,547	11,202	7,931	8,650	5,089	7,044	82,202
<b>2. Executive Council—</b>								
Salaries of Officers ..	(c)	159	672	40	..	60	(d)	931
Other expenses ..	(c)	40	19	52	..	38	(d)	149
Total ..	(c)	199	691	92	..	98	(d)	1,080
<b>3. Ministry—</b>								
Salaries of Ministers ..	22,750	23,420	11,250	11,811	7,750	8,200	6,434	91,615
Travelling expenses ..	8,418	..	(e)	..	..	2,876	1,271	12,565
Other " ..	177	976	(e)	..	..	..	1,062	2,215
Total ..	31,345	24,396	11,250	11,811	7,750	11,076	8,767	106,395
<b>4. Parliament—</b>								
<b>A. Upper House :</b>								
President and Chairman of Committees ..	2,000	1,900	1,399	..	800	1,800	300	8,199
Allowance to members ..	36,200 (f)	150	5,987	..	6,800	16,684	7,190	73,011
Railway passes ..	5,760 g	12,100 (h)	9,000	..	1,226	4,036	1,100	33,222
Postage for members ..	2,917	(i)	360	..	54	140	(e)	3,471
<b>B. Lower House :</b>								
Speaker and Chairman of Committees ..	2,000	2,790 (j)	2,538	2,000	1,400	1,800	350	12,878
Allowance to members ..	75,314	69,324	27,855	34,029	13,117	28,226	12,291	260,156
Railway passes ..	12,000 g	19,220 (k)	11,745	2,390	6,789	1,650	(e)	53,794
Postage for members ..	6,203 (h)	3,366	1,303	2,491	385	350	(e)	14,098
<b>C. Both Houses :</b>								
Standing Committee on Public Works—								
Expenses of members ..	..	..	1,220	..	1,875	..	104	3,199
Salaries of staff and contingencies ..	..	763	835	..	825	..	75	2,498
<b>Printing—</b>								
Hansard ..	8,441	5,667	4,711	2,953	2,750	3,017	..	27,539
Other ..	10,737	4,751	5,049	740	4,585	198	2,607	28,667
<b>Reporting staff—</b>								
Salaries ..	11,223	9,026	7,418	2,894	6,350	5,891	..	42,802
Contingencies ..	169	128	124	..	535	120	..	1,076
<b>Library—</b>								
Salaries ..	6,430	3,252	2,138	940	945	50	..	13,755
Contingencies ..	2,658	1,101	750	660	425	215	66	5,875
Salaries of other officers ..	42,954	30,065	12,507	8,735	7,893	8,111	4,089	114,354
Other ..	28,971	1,403	..	..	1,000	244	..	31,618
<b>D. Miscellaneous :</b>								
Fuel, light, heat, power, and water ..	3,869	1,186	1,404	689	2,230	121	} 413	26,837
Posts, telegraphs, telephones ..	3,393	3,618	} 953 {	1,001	1,176	337		
Furniture, stores, and stationery ..	2,122	1,215		218	2,716	176		
Other ..	1 72,267	1,607		2,467	2,063	1,217	694	
Total ..	335,628	172,632	85,642	71,562	61,540	79,522	30,929	837,455

(a) Salary of Lieut.-Governor. (b) Commonwealth, includes interest and sinking fund on loans, £4,486, and new works, buildings, etc., £356; Queensland, includes £650 allowances to Lieut.-Governor. (c) Included under Governor-General. (d) Duties performed by Chief Secretary's Department. (e) Not available separately. (f) Allowance to representative of Government in Legislative Council. (g) Estimated. (h) Both Houses. (i) Included with Lower House. (j) Includes Leader of the Opposition and Leader of the Labour Party. (k) Included with Upper House. (l) Includes interest and sinking fund, Parliament House, Canberra, £36,538; and maintenance of members' rooms in capital cities, £11,067.

COST OF PARLIAMENTARY GOVERNMENT—*continued.*

Particulars.	C'wlth.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
5. <i>Electoral—</i>	£	£	£	£	£	£	£	£
Salaries .. ..	91,513	2,898	843	3,136	2,608	4,410	(d)	105,408
Cost of elections, contingencies, etc. .. ..	42,675	8,286	27,241	8,672	1,319	1,944	2,161	92,298
Total .. ..	134,188	11,184	28,084	11,808	3,927	6,354	2,161	197,706
6 <i>Royal Commissions, Select Committees, etc.</i> .. ..	8,575	..	2,355	..	..	7	708	11,645
Total .. ..	8,575	..	2,355	..	..	7	708	11,645
GRAND TOTAL .. ..	539,475	220,958	139,224	103,204	81,867	102,146	49,609	1,236,483
Cost per head of population .. ..	1s. 6d.	1s. 7d.	1s. 5d.	2s. 0d.	2s. 8d.	4s. 4d.	4s. 1d.	3s. 5d.

Figures showing total cost and cost per head during each of the last five years are given in the next table.

## COST OF PARLIAMENTARY GOVERNMENT.

Year.	C'wealth.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
TOTAL.								
1938-39 ..	£ 516,455	£ 232,709	£ 114,497	£ 106,942	£ 97,383	£ 113,793	£ 49,270	£ 1,231,049
1939-40 ..	539,473	235,354	143,775	104,027	95,517	109,321	48,469	1,275,936
1940-41 ..	592,482	264,255	112,533	125,642	94,292	104,310	49,174	1,342,688
1941-42 ..	522,795	221,022	112,648	99,544	82,859	108,038	52,864	1,199,770
1942-43 ..	539,475	220,958	139,224	103,204	81,867	102,146	49,609	1,236,483
PER HEAD OF POPULATION.								
1938-39 ..	s. d. 1 6	s. d. 1 8	s. d. 1 3	s. d. 2 1	s. d. 3 3	s. d. 4 11	s. d. 4 2	s. d. 3 7
1939-40 ..	1 7	1 8	1 6	2 1	3 2	4 8	4 1	3 8
1940-41 ..	1 8	1 11	1 2	2 5	3 2	4 5	4 1	3 10
1941-42 ..	1 6	1 7	1 2	1 11	2 9	4 7	4 5	3 4
1942-43 ..	1 6	1 7	1 5	2 0	2 8	4 4	4 1	3 5

## § 5. Government Employees.

1. *Australia, 1939 to 1943.*—The following table shows at June in each of the years 1939 to 1943, the number of employees of Commonwealth and Allied Governments, State and Semi-Government bodies, and Local Government authorities. These include not only administrative employees but also employees in business undertakings, public utilities operated by Governments, and persons engaged on construction of public works, as well as employees in Commonwealth munition factories and in factories connected with Government undertakings and utilities.

## GOVERNMENT EMPLOYEES—AUSTRALIA.

June—	Commonwealth and Allied Governments.			State Govt. and Semi-Government Bodies.			Local Government Authorities.(a)			Total.		
	M.	F.	Persons.	M.	F.	Persons.	M.	F.	Persons.	M.	F.	Persons.
1939 ..	56,177	12,335	68,512	245,415	40,920	286,335	60,708	2,786	63,494	362,300	56,041	418,341
1940 ..	66,166	15,358	81,524	240,831	40,757	281,588	53,891	2,763	56,654	360,888	58,878	419,766
1941 ..	82,452	23,686	106,138	247,777	42,755	290,532	49,340	2,804	52,144	379,569	69,245	448,814
1942(b) ..	136,801	49,196	185,997	240,010	47,740	287,750	41,860	3,865	45,725	418,671	100,801	519,472
1943(b) ..	143,679	71,720	215,399	228,904	53,148	282,052	36,690	4,305	40,995	409,273	129,173	538,446

(a) Partly estimated.

(b) Includes United States of America authorities' civilian employees in Australia.



The figures in all cases exclude personnel of defence forces. The increase in number of employees of the Commonwealth and Allied Governments in 1942 and 1943 is mainly due to expansion of Government munition factories, Allied Works Projects and administrative organizations of Allied Governments and war-time departmental controls. The diminution in number of employees of State and Semi-Government authorities since 1941 was due to a curtailment of peace-time work (mainly construction work) offset to some extent by the development of war activities undertaken on behalf of the Commonwealth.

2. **Commonwealth and States, etc., June, 1942 and 1943.**—The number of employees of the Commonwealth and Allied Governments and of the State Governments, Semi-Government and Local Government authorities in each State as at June, 1942 and 1943, are shown in the following table:—

**GOVERNMENT EMPLOYEES JUNE, 1942 AND 1943.**

Employed by—	1942.			1943.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
Commonwealth and Allied Governments(a)	136,801	49,196	185,997	143,679	71,720	215,399
New South Wales ..	109,056	19,092	128,148	105,220	21,483	126,703
Victoria ..	69,628	15,142	84,770	65,178	16,083	81,261
Queensland ..	47,539	6,104	53,643	41,377	7,116	48,493
South Australia ..	29,223	5,532	34,755	26,817	6,450	33,267
Western Australia ..	18,186	3,753	21,939	18,716	4,276	22,992
Tasmania ..	8,238	1,982	10,220	8,286	2,045	10,331
Total ..	418,671	100,801	519,472	409,273	129,173	538,446

(a) Includes United States of America Authorities' civilian employees in Australia.

## § 6. Diplomatic and other Representatives Overseas and in Australia.

The following statement shows the various diplomatic and other representatives overseas and in Australia.

### AUSTRALIAN DIPLOMATIC AND OTHER REPRESENTATIVES OVERSEAS.

His Majesty's Envoy Extraordinary and Minister Plenipotentiary to—

*United States of America*, Washington, D.C.—

The Hon. Sir Owen Dixon, K.C.M.G.

*China*, Chungking—

Sir Frederic W. Eggleston.

*Netherlands*, London—

The Rt. Hon. S. M. Bruce, C.H., M.C.

*Union of Soviet Socialist Republics*, Moscow—

The Hon. James J. Maloney, M.L.C.

High Commissioner for Australia in—

*United Kingdom*, London—

The Rt. Hon. S. M. Bruce, C.H., M.C.

*Canada*, Ottawa—

Major-General The Hon. Sir William T. Glasgow, K.C.B., C.M.G., D.S.O., V.D.

*India*, New Delhi—

Lieut.-General Sir Iven Gifford Mackay, K.B.E., C.M.G., D.S.O., V.D.

*New Zealand*, Wellington—

The Hon. T. G. D'Alton.

Official Representative in New Caledonia, Noumea—

Noel Deschamps.

**Australian Government Trade Commissioner—**

*India*—H. R. Gollan, D.S.O., M.C., Simla.

**Australian Government Commissioner—**

*Egypt*—James Payne, Cairo.

**Acting Australian Trade Commissioners—**

*United States of America*—J. U. Garside, New York.

*Canada*—R. R. Ellen, Toronto.

DIPLOMATIC AND OTHER REPRESENTATIVES IN AUSTRALIA.

**Envoy Extraordinary and Minister Plenipotentiary of the—**

*United States of America*, Canberra—

The Hon. Nelson Trusler Johnson.

*China*, Canberra—

His Excellency Dr. Hsu Mo.

*Netherlands*, Canberra—

His Excellency Baron F. C. van Aerssen Beyeren van Voshol, M.W.O.

*Union of Soviet Socialist Republics*, Canberra—

His Excellency Andrei P. Vlasov.

**High Commissioner for—**

*His Majesty's Government in the United Kingdom*, Canberra—

The Rt. Hon. Sir Ronald H. Cross, Bt., M.P.

*Canada*, Canberra—

The Rt. Hon. Mr. Justice T. C. Davis.

*New Zealand*, Canberra—

Hon. J. G. Barclay.

**Commissioner for Malta—**

Captain H. C. Curmi, O.B.E., Melbourne.

TRADE COMMISSIONERS OF OVERSEAS GOVERNMENTS IN AUSTRALIA.

*United Kingdom*—

His Majesty's Senior Trade Commissioner, Sydney—

Sir R. W. Dalton, C.M.G.

His Majesty's Trade Commissioners, Melbourne—

A. W. Burton, M.B.E.

H. F. Gurney.

His Majesty's Trade Commissioner, Brisbane—

J. R. Adams.

*Canada*—

Government Trade Commissioner—

F. Palmer, Melbourne.

Acting Government Trade Commissioner—

K. F. Noble, Sydney.

*New Zealand*—

Government Trade and Tourist Commissioner and New Zealand Supply Liaison Officer—

W. Taylor, Sydney.

New Zealand Government Officer and New Zealand Supply Liaison Officer—

J. A. Malcolm, Melbourne.

*India*—

Trade Commissioner—

R. R. Saksena, Sydney.

*Netherlands Indies*—

Trade Commissioner—

J. van Holst Pellekaan, Melbourne.

### § 7. Consular Representatives of Foreign Countries in Australia.

The following tabular statement shows the number of consular representatives of foreign countries in each State at 1st January, 1944 :—

#### CONSULAR REPRESENTATIVES IN AUSTRALIA AT 1st JANUARY, 1944.

Country.	Number of Consular Representatives in—						Total, Aust.
	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	
Argentina .. .. .	1	1	..	..	..	..	2
Belgium .. .. .	4	1	1	1	1	1	9
Bolivia .. .. .	..	..	1	..	..	..	1
Brazil .. .. .	1	1	..	..	..	..	2
Chile .. .. .	2	1	..	..	..	..	3
China .. .. .	4	2	1	..	1	..	8
Colombia .. .. .	..	1	..	..	..	..	1
Costa Rica .. .. .	1	..	..	..	..	..	1
Czechoslovakia .. .. .	1	1	1	1	1	..	5
Denmark .. .. .	2	2	2	1	2	1	10
Dominican Republic .. .. .	..	..	..	1	..	..	1
Ecuador .. .. .	2	..	1	..	..	..	3
Greece .. .. .	4	2	1	1	3	..	12
Honduras .. .. .	2	..	..	..	..	..	2
Latvia .. .. .	1	1	1	1	..	..	4
Liberia .. .. .	..	..	..	1	..	..	1
Netherlands .. .. .	4	2	4	1	1	..	12
Nicaragua .. .. .	1	..	..	..	..	..	1
Norway .. .. .	3	1	3	3	4	2	16
Panama .. .. .	1	..	1	..	..	..	2
Paraguay .. .. .	1	..	..	..	1	..	2
Peru .. .. .	..	1	..	1	..	..	2
Poland .. .. .	3	1	..	..	..	..	4
Portugal .. .. .	2	1	1	1	1	..	6
Salvador .. .. .	..	1	..	..	..	..	1
Spain .. .. .	..	1	..	..	1	..	2
Sweden .. .. .	4	1	3	3	1	1	13
Switzerland .. .. .	1	1	1	..	..	..	3
United States of America .. .. .	8	3	2	1	2	..	16
Venezuela .. .. .	1	..	..	..	..	..	1
Yugoslavia .. .. .	1	1	..	..	1	..	3
<b>Total .. .. .</b>	<b>55</b>	<b>27</b>	<b>24</b>	<b>17</b>	<b>20</b>	<b>5</b>	<b>148</b>

(a) In addition, Northern Territory has a Consul for the Netherlands.

Countries having Consuls-General or Senior Consuls in Sydney are Argentina, Belgium, Brazil, Chile, China, Costa Rica, Czechoslovakia, Denmark, Ecuador, Greece, Honduras, Netherlands, Nicaragua, Norway, Paraguay, Poland, Portugal, Sweden, Switzerland and United States of America.

The Consuls-General in London for Latvia, Mexico and Turkey have jurisdiction over Australia and its Territories.

Particulars of the names and addresses of the various Consular representatives, as well as their rank and year of appointment, are contained in a publication issued by the Department of External Affairs, Canberra, entitled "Diplomatic and Consular List including British Commonwealth Representatives and Trade Commissioners in Australia."



## CHAPTER IV. LAND TENURE AND SETTLEMENT.

### § 1. Introduction.

1. **General.**—A comprehensive description of the land tenure systems of the several States is given in Official Year Book No. 4 (pp. 235-333), while later alterations are referred to in subsequent issues. In this chapter a summary is given of the principal features of existing land legislation. In previous issues an account is given of the various tenures under which Crown lands may be taken up. (See Official Year Book No. 22, pp. 133-195; also par. 2 hereunder for a conspectus of legislation at present in force.) Special sections are devoted to closer settlement, the settlement of returned soldiers on the land and advances to settlers. Particulars as to the areas of land alienated in each State and similar matter are also included.

2. **State Land Legislation.**—The legislation in force relating to Crown Lands, Closer Settlement, Returned Soldiers' Settlement and other matters dealt with in this chapter is summarized in the following conspectus:—

#### STATE LAND LEGISLATION.

New South Wales.	Victoria.	Queensland.
<b>CROWN LANDS ACTS.</b>		
Crown Lands Act 1913-1938: Western Lands Act 1901-1937: Prickly Pear Act 1924-1934.	Land Acts 1928-1941: Land (Crown Leases Adjustment) Act 1936: Land (Residence Area) Act 1939.	Land Acts 1910-1941: Upper Burnett and Callide Land Settlement Acts 1923-1932: Prickly Pear Land Acts 1923 1941: Sugar Workers' Selec- tions Acts 1923-1936: Stock Routes Improvement and Animal and Vegetable Pests Destruction Acts 1936-1938.
<b>CLOSER SETTLEMENT ACTS.</b>		
Closer Settlement Act 1904-1938.	Closer Settlement Act 1938.	Closer Settlement Acts 1906- 1941.
<b>MINING ACTS.</b>		
Mining Act 1906-1935: Mining Leases (Validation) Act 1935.	Mines Acts 1928-1937: Mines (Petroleum) Acts 1935-1939.	Mining Acts 1898-1940: Mining for Coal and Mineral Oil Acts 1912-1941: Petroleum Acts 1923-1939: Miners' Home- stead Leases Acts 1913-1939: Coal Mining Acts 1925-1940.
<b>SOLDIERS' SETTLEMENT ACTS.</b>		
Returned Soldiers' Settlement Act 1916-1938.	..	Discharged Soldiers' Settlement Acts 1917-1938.
<b>ADVANCES TO SETTLERS ACTS.</b>		
Government Savings Bank Act 1906-1932: Returned Soldiers' Settlement Act 1916-1938: Rural Bank Agency Act 1934: Farmers' Relief Act 1932- 1940: Rural Reconstruction Act 1939.	State Savings Bank Acts 1915- 1922: Primary Products Ad- vances Acts 1919-1922: Fruit and Vegetable Act 1928: Farmers Advances Acts and Drought Relief Act 1940.	State Advances Acts 1916-1934: Rural Development Co- ordination of Advances Act 1938: Farmers' Assistance (Debts Adjustment) Acts 1935- 1938: Income (State Develop- ment) Tax Acts 1938-1941: Wire and Wire-netting Ad- vances Act 1927: Wire and Wire-netting Advances Act 1933: Marsupial Proof Fencing Acts 1898-1913.

STATE LAND LEGISLATION—*continued.*

South Australia.	Western Australia.	Tasmania.
CROWN LANDS ACTS.		
Crown Lands Act 1929-1941 : Pastoral Act 1936-1939 : Mar- ginal Lands Act 1940.	Land Act 1933-1939.	Crown Lands Act 1935.
CLOSER SETTLEMENT ACTS.		
Crown Lands Act 1929-1941.	Closer Settlement Act 1927.	Closer Settlement Act 1929-1939.
MINING ACTS.		
Mining Act 1930-1941.	Mining Act 1904-1937 : Sluicing and Dredging for Gold Act 1899 : Petroleum Act 1936- 1940 : Mines Regulation Act 1906 : Mining Development Act 1902-1924 : Inspection of Machinery Act 1921 : Gold Buyers Act 1921 : Coal Mines Regulation Act 1902-1926 : Miners' Phthisis Act 1922 : Mine Workers Relief Act 1932.	Mining Act 1929 : Aid to Mining Act 1927 : Mines and Works Regulation Act 1915.
SOLDIERS' SETTLEMENT ACTS.		
Discharged Soldiers' Settlement Act 1934-1940.	Discharged Soldiers' Settlement Act 1918.	Closer Settlement Act 1929-1939.
AGRICULTURAL GRADUATES SETTLEMENT ACTS.		
Agricultural Graduates Act 1922- 1938.	..	..
ADVANCES TO SETTLERS ACTS.		
Irrigation Act 1930-1941 : Dis- charged Soldiers' Settlement Act 1934-1940 : State Bank Act 1925-1936 : Advances to Settlers Act 1930 : Agri- cultural Graduates Act 1922- 1938 : Loans for Fencing and Water Piping Act 1938-1940 : Vermin Act 1931-1939.	Agricultural Bank Act 1934 : Rural Relief Fund Act 1935.	State Advances Act 1935 : Closer Settlement Act 1929-1939 : Unemployed (Assistance to Primary Producers) Relief Act 1930-1934 : Farmers' Debt Adjustment Act 1936.

3. Northern Territory Land Legislation.—In the Northern Territory of Australia the legislation relating to Crown lands is embodied in the Crown Lands Ordinance 1931-1939 : that relating to mining in the Mining Ordinance 1939-1942, the Gold Dredging Act 1899, the Mineral Oil and Coal Ordinance 1922-1923, the Mining Development Ordinance 1930-1940, and the Mines Regulation Ordinance 1939 : and that relating to advances to settlers in the Encouragement of Primary Production Ordinance 1931-1938.

4. Australian Capital Territory Land Legislation.—In the Australian Capital Territory the Ordinances relating to Crown lands are the Leases Ordinance 1918-1937, the City Area Leases Ordinance 1936-1938, the Church Lands Leases Ordinance 1924-1932, and the Leases (Special Purposes) Ordinance 1925-1943.

5. **Administration and Classification of Crown Lands.**—In each of the States there is a Lands Department under the direction of a Minister who is charged generally with the administration of the Acts relating to the alienation, occupation and management of Crown lands. The administrative functions of most of the Lands Departments are to some extent decentralized by the division of the States into what are usually termed Land Districts, in each of which there is a Lands Office, which deals with applications for selections and other matters generally appertaining to the administration of the Acts within the particular district. In some of the States there is a local Land Board or a Commissioner for each district or group of districts. In the Northern Territory the Administrator, under the control of the Minister for the Interior, is charged with the general administration of the Lands Ordinance and of Crown lands in the Northern Territory. In the Australian Capital Territory the administration of the Leases Ordinances is in the hands of the Department of the Interior.

Crown lands are generally classified according to their situation, the suitability of the soil for particular purposes, and the prevailing climatic and other conditions. The modes of tenure under the Acts, therefore, as well as the amount of purchase-money or rent, and the conditions as to improvements and residence, vary considerably. The administration of special Acts relating to Crown lands is in some cases in the hands of a Board under the general supervision of the Minister.

In each of the States and in the Northern Territory there is also a Mines Department which is empowered under the several Acts relating to mining to grant leases and licences of Crown lands for mining and allied purposes.

6. **Classification of Tenures.**—The tabular statement which follows shows the several tenures under which Crown lands may be acquired or occupied in each State. In the Northern Territory, leases (excepting pastoral and "miscellaneous") are granted in perpetuity, pastoral and "miscellaneous" leases being restricted to periods of not more than 42 and 21 years respectively. The Lands Ordinance provides also for the grant in fee simple of town lands, agricultural lands, garden lands and tropical lands, and for the issue of grazing, occupation and "miscellaneous" licences. The mining leases and holdings are, generally speaking, similar to those of the States. In the Australian Capital Territory leases only are issued.

#### STATE CROWN LANDS : TENURES.

New South Wales.	Victoria.	Queensland.
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#### FREE GRANTS AND RESERVATIONS.

Free Grants : Reservations.	Free Grants : Reservations.	Free Grants : Reservations.
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#### UNCONDITIONAL PURCHASES OF FREEHOLD.

Auction Sales : After-auction Purchases : Special Purchases : Improvement Purchases.	Auction Sales.
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#### CONDITIONAL PURCHASES OF FREEHOLD.

Residential Conditional Purchases : Non-residential Conditional Purchases : Additional Conditional Purchases : Conversions of various Leasehold Tenures into Conditional Purchases : Purchases of Town Leases, Suburban Holdings, Returned Soldiers' Special Holdings, Residential Leases, Week-end Leases.	Residential Selection Purchase Leases : Non-residential Selection Purchase Leases : Licences of Auriferous worked-out Lands : Conditional Purchase Leases of Swamp or Reclaimed Lands : Selection Purchase Leases of Mallee Lands : Murray River Settlements : Special Settlement Areas : Conversions into Selection Purchase Leases.
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STATE CROWN LANDS: TENURES—*continued.*

New South Wales.	Victoria.	Queensland.
LEASES AND LICENCES UNDER LAND ACTS.		
Conditional Leases: Conditional Purchase Leases: Special Conditional Purchase Leases: Homestead Selections: Homestead Farms: Settlement Leases: Special Leases: Annual Leases: Scrub Leases: Snow Leases: Inferior Lands Leases: Crown Leases: Improvement Leases and Leases under Improvement Conditions: Occupation Licences: Leases of Town Lands: Suburban Holdings: Weekend Leases: Residential Leases: Leases in Irrigation Areas: Western Lands Leases: Forest Leases: Forest Permits: Prickly Pear Leases.	Perpetual Leases: Auriferous Lands Licences: Leases of Swamp or Reclaimed Lands: Perpetual Leases of Swamp or Reclaimed Lands: Grazing Licences: Perpetual Leases (Mallee): Miscellaneous Leases and Licences: Bee Farm Licences: Bee Range Area Licences: Eucalyptus Oil Licences: Forest Leases: Forest Licences: Forest Townships: Land (Residence Areas).	Perpetual Lease Selections: Perpetual Lease Prickly Pear Selections: Perpetual Lease Prickly Pear Development Selections: Grazing Selections: Development Grazing Selections: Prickly Pear Development Grazing Selections: Pastoral Holdings: Preferential Pastoral Holdings: Pastoral Development Holdings: Stud Holdings: Prickly Pear Leases: Forest Grazing Leases: Occupation Licences: Special Leases: Auction Perpetual Leases.

## CLOSER SETTLEMENT

Sales by Auction and Tender: After-auction Sales and Tenders: Settlement Purchases.	Sales of Land: Conditional Purchase Leases: Conditional Purchase Leases in Mountainous Areas.	Perpetual Lease Selections: Settlement Farm Leases: Perpetual Town, Suburban and Country Leases.
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## LEASES AND LICENCES UNDER MINING ACTS.

Holdings under Miners' Rights: Gold-mining Leases: Mineral Leases: Coal and Oil-mining Leases: Business Licences: Residence Areas.	Holdings under Miners' Rights: Gold-mining Leases: Mineral Leases: Water Right Licences: Petroleum Prospecting Licences: Petroleum Mineral Leases.	Holdings under Miners' Rights: Permits to Prospect for Petroleum: Petroleum Leases: Licences to Prospect for Coal and Mineral Oil: Gold-mining Leases: Mineral Leases: Coal-mining Leases: Business Areas: Residence Areas: Miners' Homestead Leases and Miners' Homestead Perpetual Leases.
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## SETTLEMENT OF DISCHARGED SOLDIERS AND SAILORS.

Soldiers' Group Purchases: Returned Soldiers' Special Holding Leases: Returned Soldiers' Special Holding Purchases: also Purchases and Leases under Crown Lands Act of lands set apart for application by discharged soldiers exclusively.	(Same Tenures as under the Land and Closer Settlement Acts.)	Perpetual Lease Selections: Perpetual Town and Suburban Leases.
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STATE CROWN LANDS: TENURES—*continued.*

South Australia.	Western Australia.	Tasmania.
FREE GRANTS AND RESERVATIONS.		
Free Grants: Reservations.	Free Grants: Reservations.	Free Grants: Reservations.
UNCONDITIONAL PURCHASES OF FREEHOLD.		
Auction Sales: By Private Contract (Land passed at Auction).	Auction Sales.	Auction Sales: After-auction Sales: Sales of Land in Mining Towns.
CONDITIONAL PURCHASES OF FREEHOLD.		
Agreements to Purchase: Special Agreements to Purchase (40 years' term): Homestead Blocks: Town of Whyalla Allotments in fee-simple.	Conditional Purchases with Residence: Conditional Purchases without Residence: Conditional Purchases by Direct Payment: Conditional Purchases of Land for Vineyards, etc.: Conditional Purchases by Pastoral Lessees: Conditional Purchases of Grazing Lands: Homestead Farms: Special Settlement Leases.	Selections for Purchase: Additional Selections for Purchase: Sales by Auction: Sales by Private Contract: After-auction Sales: Special Settlement Areas.
LEASES AND LICENCES UNDER LAND ACTS.		
Perpetual Leases: Special Perpetual Leases (Free Period): Perpetual Leases of Homestead Blocks: Miscellaneous Leases: Licences: Pastoral Leases: Irrigation Blocks: Town Allotments in Irrigation Areas and Town of Whyalla: Forest Leases: Perpetual Leases Marginal Lands.	Pastoral Leases: Special Leases: Leases of Town and Suburban Lands: Cropping Leases.	Grazing Leases: Pastoral Leases: Leases of Land covered with Button Grass, etc.: Leases of Mountainous Land: Miscellaneous Leases: Temporary Licences: Occupation Licences: Residence Licences: Business Licences: Forest Leases, Licences and Permits.
CLOSER SETTLEMENT.		
Sales by Auction: Agreements to Purchase: Perpetual Leases: Miscellaneous Leases.	Conditional Purchases: Town and Suburban Areas.	Leases with Right of Purchase: Special Sales.
LEASES AND LICENCES UNDER MINING ACTS.		
Holdings under Miners' Rights: Search Licences: Occupation Licences: Gold Leases: Mineral Leases: Coal Leases: Oil Leases: Dredging Leases: Business Areas: Residence Areas: Miscellaneous Leases (Salt and Gypsum).	Holdings under Miners' Rights: Gold-mining Leases: Mineral Leases: Business Areas: Residence Areas: Miners' Homestead Leases.	Holdings under Miners' Rights: Prospectors' Licences: Gold-mining Leases: Mineral Leases.
SETTLEMENT OF DISCHARGED SOLDIERS AND SAILORS.		
Perpetual Leases: Pastoral Leases: Agreements to Purchase: Miscellaneous Leases.	Ordinary Tenure: Special Tenure.	Free Grants: Ordinary Tenure: Special Tenure.
AGRICULTURAL GRADUATES SETTLEMENT.		
Agreements to Purchase: Perpetual Leases.	..	..

## § 2. Free Grants and Reservations.

1. *New South Wales.*—(i) *Free Grants.* Crown lands may, by notification in the *Gazette*, be dedicated for public purposes and be granted therefor in fee-simple. Such lands may be placed under the care and management of trustees, not less than three in number, appointed by the Minister.

(ii) *Reservations.* Temporary reservations of Crown lands from sale or lease may be made by the Minister.

(iii) *Areas Granted and Reserved.* During 1941-42, 2,649 acres were dedicated and permanently reserved, the number of separate dedications being 61.

At 30th June, 1942, the total area reserved, including temporary reserves, was 18,008,528 acres, of which 5,217,413 acres were for travelling stock, 4,004,672 acres pending classification and survey, 3,144,457 acres for forest reserves, 833,574 acres for water and camping, 1,235,293 acres for mining, and the remainder for temporary commons, railways, recreation reserves and parks, reserves for aborigines, and miscellaneous purposes. A large proportion of the total area reserved is occupied under annual, special, scrub or forestry leases or on occupation licences or permissive occupancy, and is included under the appropriate leasehold tenures described in the following sections.

2. *Victoria.*—(i) *Free Grants.* The Governor may grant, convey or otherwise dispose of Crown lands for public purposes.

(ii) *Reservations.* The Governor may temporarily or permanently reserve from sale, lease or licence any Crown lands required for public purposes, and may except any area of Crown lands from occupation for mining purposes under any miner's right.

(iii) *Areas Granted and Reserved.* During 1941, 609 acres were granted without purchase. At the end of 1941, the total area both temporarily and permanently reserved was 8,206,724 acres, consisting of roads, 1,794,218 acres; water reserves, 314,079 acres; agricultural colleges, etc., 88,586 acres; permanent forests and timber reserves under Forests Acts, 4,185,192 acres and 717,982 acres respectively; forests and timber reserves under Land Acts, 153,841 acres; reserves in the Mallee, 410,000 acres; and other reserves, 542,826 acres.

3. *Queensland.*—(i) *Free Grants.* The Governor may grant in trust any Crown land which is or may be required for public purposes. Under the Irrigation Act, land to be used for the purpose of any undertaking under that Act may be vested in fee-simple in the Irrigation Commission.

(ii) *Reservations.* The Governor may reserve from sale or lease, either temporarily or permanently, any Crown land which is or may be required for public purposes. Reserved lands may be placed under the control of trustees who are empowered to lease the same for not more than 21 years with the approval of the Minister.

Under the State Forests and National Parks Act, the Governor may permanently reserve any Crown lands and declare them to be a State Forest or a national park.

(iii) *Areas Granted and Reserved.* During 1941 the area granted in fee-simple without payment was 52 acres, the area set apart as reserves 467,772 acres, and reserves cancelled 548,646 acres. The total area reserved including roads at the end of 1941 was 21,252,252 acres, made up as follows:—Timber reserves, 3,073,005 acres; State forests and national parks, 3,945,178 acres; for use of aborigines, 5,592,753 acres; streets, surveyed roads and surveyed stock routes, 2,975,315 acres; and general, 5,666,001 acres.



4. *South Australia.*—(i) *Free Grants.* The Governor may dedicate Crown lands for any public purpose and grant the fee-simple of such lands, with the exception of foreshores and land for quays, wharves or landing-places, which are inalienable in fee-simple from the Crown.

(ii) *Reservations.* The Governor may reserve Crown lands for the use and benefit of aborigines, military defence, forest reserves, railway stations, park lands or any other purpose that he may think fit.

(iii) *Areas Granted and Reserved.* During 1941-42 free grants were issued for an area of 148 acres, and reserves comprising 308,550 acres were proclaimed. At 30th June, 1942, the total area of surveyed roads, railways and other reserves was 20,202,030 acres, including 16,726,400 acres in the north-west of the State set apart as an aboriginal reserve in 1921, and 595,200 acres at Ooldea, adjoining the transcontinental railway, reserved for a similar purpose in 1940.

5. *Western Australia.*—(i) *Free Grants.* The Governor may dispose of, in such manner as for the public interest may seem best, any lands vested in the Crown for public purposes, and may grant the fee-simple of any reserve to secure the use thereof for the purpose for which such reserve was made.

(ii) *Reservations.* The Governor may reserve any lands vested in the Crown for public purposes. Areas not immediately required may be leased by the Governor for periods up to 10 years. Reserves may be placed under the control of a local authority or trustees, with power to lease them for a period not exceeding 21 years, or may be leased for 99 years. Temporary reserves may also be proclaimed.

(iii) *Areas Granted or Reserved.* During the year ended 30th June, 1942, a few small areas of land were granted in fee-simple, and approximately 53,852 acres were reserved for various purposes. At 30th June, 1942, the total area reserved was 49,161,210 acres, comprising State forests, 3,311,000 acres, timber reserves, 1,768,000 acres, and other reserves, 44,082,210 acres.

6. *Tasmania.*—(i) *Free Grants.* No mention is made in the Crown Lands Act respecting free grants of land, and it is expressly stated that no lands may be disposed of as sites for religious purposes except by way of sale under the Act. Under the Returned Soldiers' Settlement Act of 1916, returned soldiers who applied prior to 31st March, 1922, were eligible to receive free grants of Crown land not exceeding £100 each in value, but these grants were conditional on the land being adequately improved.

(ii) *Reservations.* The Governor in Council may except from sale or lease, and reserve to His Majesty any Crown land for public purposes, and vest for such term as he thinks fit any land so reserved in any person or corporate body. Any breach or non-fulfilment of the conditions upon which such land is reserved renders it liable to forfeiture. A school allotment, not exceeding 5 acres in area, may also be reserved.

(iii) *Areas Granted or Reserved.* The total area reserved at the end of 1941 was 2,815,562 acres, excluding 21,280 acres of land occupied by Commonwealth and State Departments.

7. *Northern Territory.*—(i) *Reservations.* The Governor-General may resume for public purposes any Crown lands not subject to any right of or contract for purchase, and may reserve, for the purpose for which they are resumed, the whole or any portion of the land so resumed.

(ii) *Areas Reserved.* The total area of reserves at 30th June, 1942, was 69,242.86 square miles, comprising aboriginal native, 67,243.93 square miles; and other reserves, 1,998.93 square miles.

### § 3. Unconditional Purchases of Freehold.

1. *New South Wales.*—(i) *Auction Purchases.* Crown lands, not exceeding in the aggregate 200,000 acres in any one year, may be sold by public auction in areas not exceeding half-an-acre for town lands, 20 acres for suburban lands, and 640 acres for country lands, at the minimum upset price of £8, £2 10s., and 15s. per acre respectively. At least 10 per cent. of the purchase-money must be paid at the time of sale, and the balance within three months, or the Minister may allow the payment of such balance to be deferred for a period not exceeding ten years, 4 per cent. interest being charged. Town blocks in irrigation areas may also be sold by auction.

(ii) *After-Auction Purchases.* In certain cases, land offered at auction and not sold may be purchased at the upset price. A deposit in accordance with the terms and conditions under which the land was previously offered must be lodged, and, if the application be approved by the Minister, the balance of purchase money is payable as required by the specified terms and conditions.

(iii) *Special Purchases.* Under certain circumstances, land may be sold in fee-simple, the purchaser paying the cost of survey and of reports thereon, in addition to the purchase-money. The minimum upset price per acre is the same as in the case of land sold by auction. Areas not exceeding 5 acres in extent may be sold to recognized religious bodies and public authorities at prices determined by the local land board.

(iv) *Improvement Purchases.* The owner of improvements in land in authorized occupation by residence under any Mining or Western Lands Act of land within a gold-field or mineral field may purchase such land without competition at a price determined by the local Land Board, but at not less than £8 per acre for town lands or £2 10s. per acre for other lands. The area must not exceed  $\frac{1}{4}$  acre within a town or village, or 2 acres elsewhere, and no person may purchase more than one such area within 3 miles of a similar prior purchase by him.

(v) *Areas Sold.* During the year ended 30th June, 1942, the total area sold was 632 acres, of which 63 acres were sold by auction and 67 acres as after-auction purchases, while 25 acres were sold as improvement purchases and 477 acres as special purchases. The amount realized for the sale of the whole area was £63,867.

2. *Victoria.*—(i) *General.* Lands, not exceeding 100,000 acres in any one year, specially classed for sale by auction may be sold by auction in fee-simple at an upset price not less than £1 per acre. The purchaser must pay the survey fee at the time of the sale, together with a deposit of  $12\frac{1}{2}$  per cent. of the whole price; the residue is payable in equal half-yearly instalments with interest. Any unsold land in a city, town or borough, areas specially classed for sale, isolated pieces of land not exceeding 150 acres in area, and sites for churches or charitable purposes, if not more than 3 acres in extent, may be sold by auction on the same terms. Swamp or reclaimed lands may also be sold by auction, subject to the condition that the owner keeps open all drains, etc., thereon.

(ii) *Areas sold at Auction and by Special Sales.* During 1941, a total of 1,633 acres was disposed of under this tenure, 1,069 acres being country lands, while 564 acres of town and suburban lands were sold by auction.

3. *Queensland.*—(i) *General.* From 1917 to 1929 the law precluded land being made available for any class of selection which gave the selector the right to acquire the freehold title. Amending legislation giving power to make land available under freehold tenures was passed in 1929 but this provision was repealed by the Act of 1932.

(ii) *Areas Sold, etc.* During 1941, no unconditional selections were made freehold.

4. *South Australia.*—(i) *Sales by Auction.* The following lands may be sold by auction for cash :—(a) special blocks ; (b) Crown lands which have been offered for lease and not taken up within two years ; (c) town lands ; and (d) suburban lands which the Governor excepts from the operations of the Land Board. A purchaser must pay 20 per cent. of the purchase money in cash, and the balance within one month or within such extended time as the Commissioner of Crown Lands may allow. Town lands may be sold subject to the condition that they cannot be transferred or mortgaged within six years without the consent of the Commissioner. If the Commissioner of Crown Lands so determines, town lands may also be offered at auction on terms that the buyer may at his option purchase the lands for cash or on agreement for sale and purchase.

(ii) *Areas Sold, etc.* During the year ended 30th June, 1942, the area of town lands and special blocks sold by auction was 160 acres. In addition, 22,082 acres were sold at fixed prices, and the purchases of 23,578 acres on credit were completed, making a total of 45,820 acres.

5. *Western Australia.*—(i) *Sales by Auction.* Town, suburban and village lands must be sold by auction after being surveyed into lots and notified in the *Gazette*. Ten per cent. of the purchase-money must be paid in cash, together with the value of any improvements, and the balance in four equal quarterly instalments. Suburban land must be fenced within two years, and no Crown grant may be issued until the land is fenced.

(ii) *Areas Sold.* During the year ended 30th June, 1942, the area of town and suburban allotments sold by auction was 284 acres in 110 allotments.

6. *Tasmania.*—(i) *Sales by Auction.* Town lands may be sold by auction for cash or on credit. No town land, the price of which is less than £15, may be sold on credit.

(ii) *After-Auction Sales.* Town lands, not within 5 miles of any city, which, after having been offered at auction, have not been sold, may be sold at the upset prices by private contract.

(iii) *Sales of Land in Mining Towns.* Any person being the holder of a residence licence or business licence who shall be in lawful occupation of any residence area or business area, and who shall be the owner of buildings and permanent improvements upon such land of a value equal to or greater than the upset price of such area, shall be entitled to purchase such area at the upset price at any time prior to the day on which such area is to be offered for sale as advertised. The upset price for such area shall not be less than £10, excluding the value of improvements, cost of survey, and of grant deed. The area which may be so purchased may, with the consent of the Commissioner, exceed one-quarter of an acre, but shall not in any case exceed one-half of an acre.

## § 4. Conditional Purchases of Freehold.

1. *General.*—The various methods of obtaining Crown lands by conditional purchase in the several States are given in some detail in preceding issues of the *Official Year Book* (see No. 22, pp. 141-9).

2. *New South Wales.*—At 30th June, 1942, the total number of conditional purchases in existence was 42,097, covering an area of 14,089,201 acres. The following table gives particulars of conditional purchases, including non-residential conditional purchases



and special area conditional purchases, for the year ended 30th June, 1942, together with the total area for which deeds have been issued :—

### CONDITIONAL PURCHASES : NEW SOUTH WALES.

Year ended 30th June—	Applications Received. (a)	Applications Confirmed.(a)		Areas for which Deeds have been Issued.	
	Number.	Number.	Area.	During the Year.	To end of Year.
			Acres.	Acres.	Acres.
1942 .. ..	32	13	1,527	663,437	30,866,581

(a) Excludes 192 conversions from other tenures comprising 33,763 acres.

3. Victoria.—Excluding selections in the Mallee country, the total area purchased conditionally in 1941 was 23,882 acres, comprising 23,450 acres with residence and 432 acres without residence. The number of selectors was 116. No Mallee country was taken up conditionally during the year.

In addition the final payments were made during the year on conditional purchases comprising 98 acres in country other than Mallee and 1,452 acres of Mallee lands.

4. Queensland.—The following selections were made freehold during 1941 :—Agricultural Farms, 425,670 acres ; Agricultural Homesteads, 1,707 acres ; Prickly Pear Selections, 19,702 acres ; and Prickly Pear Development Selections, 3,722 acres.

5. South Australia.—The land allotted under agreements to purchase during 1941-42 was 7,448 acres, comprising Eyre's Peninsula Railway lands 32 acres, closer settlement lands 3,696 acres, soldiers' acquired lands 1,135 acres, surplus lands 648 acres, and other Crown lands 1,937 acres.

6. Western Australia.—During the year ended 30th June, 1942, the number of holdings conditionally alienated was 287, the total area involved being 171,845 acres, comprising conditional purchases by deferred payments with residence of 162,611 acres and free homestead farms 9,234 acres. Under the heading "deferred payments (with residence)" are included conditional purchases of grazing lands.

In addition, Crown grants were issued during the year for the following selections, the prescribed conditions having been complied with.—Free homestead farms 6,941 acres and conditional purchases 81,197 acres.

7. Tasmania.—During 1941, conditional purchases of 25,675 acres were completed. The total area sold conditionally was 5,489 acres, comprising selections for purchase 5,224 acres, and town and suburban allotments 265 acres. The numbers of applications received and confirmed during the year were 279 and 131 respectively.

### § 5. Leases and Licences under Land Acts.

1. General.—Information regarding the methods of obtaining leases and licences of Crown lands in the several States and Territories is given in preceding issues of the Official Year Book (see No. 22, pp. 149-63).

2. New South Wales.—On 30th June, 1942, the area of leases and licences under the control of the Department of Lands, the Water Conservation and Irrigation Commission, and the Western Lands Commission, comprised 111,455,161 acres of Crown lands, compared with 111,396,379 acres at the close of the previous year

The following table shows the areas which were granted under lease or licence during 1941-42, and those held under various descriptions of leases and licences at the end of that year :—

AREAS TAKEN UP AND OCCUPIED UNDER LEASE OR LICENCE : NEW SOUTH WALES, 1941-42.(a)

Particulars.	Area taken up during the year.	Area occupied at end of the year.
<i>Areas taken up under Crown Lands Act.</i>		
Occupation licences—ordinary .. .. .	Acres.	Acres.
preferential .. .. .	..	929,067
Conditional leases .. .. .	..	306,469
Conditional purchase leases .. .. .	1,912	11,462,272
Settlement leases .. .. .	..	175,758
Improvement leases .. .. .	..	2,798,144
Annual leases .. .. .	180	81,821
Scrub leases .. .. .	50,664	502,036
Snow leases .. .. .	..	78,042
Special leases .. .. .	..	439,767
Inferior land leases .. .. .	82,624	1,060,654
Residential leases (on gold and mineral fields) .. .. .	..	25,513
Church and school lands .. .. .	382	5,988
Permissive occupancies .. .. .	..	11
Prickly pear leases .. .. .	108,275	1,810,765
Crown leases .. .. .	5,912	185,086
Homestead farms .. .. .	27,052	7,255,259
Homestead selections and grants .. .. .	12,725	4,540,231
Suburban holdings .. .. .	178	1,659,786
Week-end leases .. .. .	425	54,011
Leases of town lands .. .. .	27	200
Returned soldiers' special holdings .. .. .	..	63
Irrigation areas .. .. .	..	15,078
	390	269,714
<i>Leases and Permissive Occupancies under Western Lands Act.</i>		
Conditional Leases .. .. .	..	98,754
Leases being issued .. .. .	..	22,120
Perpetual leases .. .. .	} 117,728 {	47,756,189
Other long-term leases .. .. .		29,845,552
Permissive occupancies .. .. .		76,811
	99,693	
Total .. .. .	508,167	111,455,161

(a) Excludes mining leases and permits and forest leases and occupation permits.

3. Victoria.—During 1941 Crown lands taken up comprised numerous grazing licences of a temporary nature, in addition 11,573 acres of grazing lands previously held under grazing licences were converted to perpetual leases. The area of Crown lands occupied under leases and licences in 1941 was 8,261,191 acres (an increase of 144,462 acres compared with the previous year) comprising grazing licences (excluding Mallee) 5,811,037 acres, Mallee lands 2,341,630 acres, auriferous lands (licences) 19,097 acres, swamp lands (leases) 3,870 acres, perpetual leases (other than Mallee) 16,550 acres and perpetual leases (Mallee) under Land Act 1928, 69,007 acres.

4. Queensland.—The total area taken up under lease or licence during 1941, including land in the Dawson Valley Irrigation Area, was 7,128,938 acres, made up as follows :—Pastoral leases 5,933,840 acres; occupation licences 436,280 acres; grazing farms (all classes), 286,338 acres; grazing homesteads (all classes), 159,232 acres,

perpetual lease selections 66,057 acres; perpetual lease prickly pear selections 2,057 acres; perpetual lease prickly pear development selections 14,731 acres; auction perpetual leases—town 104 acres, suburban 45 acres, and country 467 acres; special leases 10,975 acres; leases of reserves 42,052 acres; and forest grazing leases 176,760 acres.

The gross area held at the end of 1941 under pastoral tenure was 394,039 square miles.

5. **South Australia.**—The total area leased during 1941–42 under the different forms of lease tenure was 3,450,809 acres, made up as follows:—Perpetual leases—irrigation and reclaimed lands 789 acres, surplus lands 2,973 acres, town lands (Whyalla) 22 acres, marginal lands 235,564 acres, and other Crown lands 52,779 acres; pastoral leases 2,718,969 acres; and miscellaneous leases—grazing and cultivation 439,713 acres.

6. **Western Australia.**—The number of leases issued by the Lands Department during the year ended 30th June, 1942, was 198 and the total area of leases issued 2,226,588 acres, comprising pastoral leases 2,027,087 acres, special leases (including leases under Section 116 of the Land Act 1933–1939 for grazing purposes) 195,438 acres, leases of reserves 4,053 acres, and residential leases 10 acres.

7. **Tasmania.**—The area of pastoral leases issued during 1941 was 172,284 acres.

8. **Northern Territory.**—The total area held under lease, licence and permit at 30th June, 1942, was 208,684.85 square miles, comprising pastoral leases 164,945.25 square miles, pastoral permits 696 square miles, grazing licences 39,833 square miles, agricultural leases 116.17 square miles, mission leases, 3,046 square miles, miscellaneous leases 47.90 square miles, town lands leases 0.42 square miles and occupation licences 0.11 square miles. The total annual rentals of these areas is £26,363.

9. **Australian Capital Territory.**—The number of leases granted under the City Area Leases Ordinance 1936–1938 to 30th June, 1942 (excluding leases surrendered and determined), was 546, representing a capital value of £235,528. During the year 30 new leases were granted.

Fourteen leases have been granted under the Church Lands and Special Purposes Ordinances for church and scholastic purposes. In addition, a lease in perpetuity has been granted under the Church of England Land Ordinance 1926 for church purposes.

## § 6. Leases and Licences under Mining Acts.

1. **General.**—Information regarding the various forms of leases and licences under Mining Acts in the several States and the Northern Territory is given in preceding issues of the Official Year Book (see No. 22, pp. 170–7).

2. **New South Wales.**—The following table gives particulars of operations on Crown lands for the year 1940–41:—

### AREAS TAKEN UP UNDER MINING ACTS: NEW SOUTH WALES, 1940–41.

Purposes for which Issued or Occupied.	Areas Taken up during Year.	Total Areas Occupied at End of Year.
	Acres.	Acres.
Gold-mining .. .. .	5,320	13,976
Mining for other minerals .. .. .	26,676	250,870
Authorities to prospect .. .. .	14,043	10,228
Other purposes .. .. .	772	9,371
<b>Total .. .. .</b>	<b>46,811</b>	<b>283,545</b>

The area of land held under lease only at 30th June, 1941, was 273,317 acres.



3. **Victoria.**—During 1942, 107 leases, licences, etc. (including 38 for gold-mining) were issued covering an area of 130,949 acres, the rent, fees, etc., for which amounted to £774. The area occupied at the end of the year was 648,384 acres, comprising 26,377 acres for gold, 605,462 acres for oil, 12,981 acres for coal (including State Coal-mine area of 7,575 acres and State Electricity Commission area of 2,800 acres) and 3,564 acres for miscellaneous purposes.

4. **Queensland.**—During 1942, the number of miners' rights issued was 2,720, and of business licences 6. The following table gives particulars regarding the areas of lands taken up under lease or licence and the total areas occupied for 1942. In addition, an area estimated at 25,000 acres was, at the end of 1942, held under miners' rights and dredging claims.

AREAS TAKEN UP UNDER MINING ACTS : QUEENSLAND, 1942.

Particulars.	Areas Taken up during Year.	Total Areas Occupied at End of Year.
	Acres.	Acres.
Gold-mining .. .. .	164	2,991
Mining for other minerals .. .. .	509	24,471
Miners' homestead leases .. .. .	5,925	401,937
Petroleum-prospecting permits .. .. .	..	13,500
Mineral oil prospecting areas .. .. .	656	656
Coal Prospecting Areas .. .. .	2,870	2,870
Total .. .. .	10,124	446,425

The area of land held under lease only at 31st December, 1942, was 429,399 acres.

5. **South Australia.**—The following table gives particulars of operations for 1941-42.

AREAS TAKEN UP UNDER MINING ACTS : SOUTH AUSTRALIA, 1941-42.

Particulars.	Areas Taken up during Year.	Total Areas Occupied at End of Year.
	Acres.	Acres.
Gold-mining leases .. .. .	12	571
Mineral and miscellaneous leases .. .. .	837	60,962
Claims .. .. .	2,687	8,893
Search licences .. .. .	..	..
Occupation licences .. .. .	9	37
Total .. .. .	3,545	70,463

6. **Western Australia.**—The following table gives particulars of operations for 1942. The figures exclude holdings under miners' rights and mineral oil licences. Of the areas shown as taken up in 1942, the area under lease was 1,520 acres for gold-mining, 93 for mining for other minerals, 74 for miners' homesteads, and 1 for miscellaneous—a total of 1,688 acres. The balance was taken up under licences.

AREAS TAKEN UP UNDER MINING ACTS : WESTERN AUSTRALIA, 1942.

Particulars.	Areas Taken up during Year.	Total Areas Occupied at End of Year.
	Acres.	Acres.
Gold-mining .. .. .	8,707	27,994
Mining for other minerals .. .. .	3,037	46,538
Other purposes .. .. .	478	37,698
Total .. .. .	12,222	112,230

7. **Tasmania.**—During 1942, the number of leases issued was 66, of which 6 were for gold-mining, covering 78 acres; and 21 for tin-mining, covering 267 acres. The following table gives particulars for 1942 :—

#### AREAS TAKEN UP UNDER MINING ACTS : TASMANIA, 1942.

Particulars.	Areas Taken up during Year.	Total Areas Occupied at End of Year.
	Acres.	Acres.
Gold-mining .. .. .	55	1,176
Mining for other minerals .. .. .	2,573	15,135
Licences to search for coal or oil .. .. .	..	..
Mining for coal .. .. .	20	5,973
Other purposes .. .. .	439	3,302
<b>Total</b> .. .. .	<b>3,087</b>	<b>25,586</b>

8. **Northern Territory.**—At 30th June, 1942, there existed 100 mineral leases comprising 2,368 acres, and 148 gold-mining leases, comprising 2,645 acres. There were also 38 gold prospecting areas for 480 acres, 24 mineral prospecting areas for 390 acres, 7 dredging lease applications for 1,520 acres, 13 gold claims for 190 acres, 19 mineral claims for 358 acres, 15 machinery and tailings areas for 59 acres, and other areas held under mining lease amounted to 96 acres.

9. **Summary.**—The following table shows the areas under leases and licences for mining purposes and the total areas occupied for the years 1938 to 1942 :—

#### CROWN LANDS, LEASES AND LICENCES FOR MINING PURPOSES.

Year.	N.S.W. (a)	Victoria.	Q'land. (b)	S. Aust. (a)(b)	W. Aust.(c)	Tas. (b)	Total. (d)
AREAS FOR WHICH LEASES AND LICENCES ISSUED DURING YEAR.							
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1938 ..	26,246	102,129	39,199	27,176	64,380	5,325	264,455
1939 ..	28,320	171,622	33,414	19,434	57,838	3,230	313,858
1940 ..	46,811	510,700	22,089	10,616	44,613	5,993	640,822
1941 ..	(e)	12,799	28,328	3,545	29,563	775	(e)
1942 ..	(e)	130,949	10,124	..	12,222	3,087	(e)

#### TOTAL AREAS OCCUPIED AT END OF YEAR.

1938 ..	217,036	275,909	541,485	100,745	155,252	34,893	1,325,320
1939 ..	219,110	351,715	469,733	78,517	144,335	31,347	1,294,757
1940 ..	283,545	625,165	485,292	71,501	140,129	28,062	1,633,694
1941 ..	(e)	577,446	470,795	70,463	123,573	27,678	(e)
1942 ..	(e)	648,384	446,425	..	112,230	25,586	(e)

(a) Year ended 30th June following. (b) Excludes lands held under miners' rights only.  
 (c) Excludes holdings under miners' rights and mineral oil licences. (d) Excludes Northern Territory.  
 (e) Not yet available.

### § 7. Closer Settlement.

1. **General.**—Particulars regarding the methods of acquisition and disposal of land for closer settlement in the several States are given in preceding issues of the Official Year Book (see No. 22, pp. 163-9).

2. **New South Wales.**—Since the inception of closer settlement in 1905, 1,854 estates totalling 4,145,032 acres have been purchased by the Crown for purposes of closer settlement of civilians and returned soldiers. The total area set apart and the number of farms made available to 30th June, 1942, are as follows :—

**CLOSER SETTLEMENT AREAS (a) : NEW SOUTH WALES.**

To 30th June—	Areas.			Values.		
	Acquired Lands.	Adjoining Crown Lands.	Total.	Cost of Acquired Lands.	Value of Adjoining Crown Lands.	Total.
	Acres.	Acres.	Acres.	£	£	£
1942 ..	4,145,032	205,541	4,350,573	15,107,573	355,637	15,463,210

(a) Includes 70 long-term leases resumed for closer settlement, but excludes areas acquired for village sites, 3,665 acres.

The following table gives particulars regarding the disposal of the farms by closer settlement purchase at 30th June, 1942 :—

**CLOSER SETTLEMENT ALLOTMENTS : NEW SOUTH WALES.**

At 30th June—	Farms Allotted to Date.			Total Amount received in respect of Closer Settlement Farms.
	Number.	Area.	Capital Value.	
	No.	Acres.	£	£
1942 .. .. .	9,109	4,145,032	15,107,573	12,967,233

3. **Victoria.**—The Closer Settlement Commission was abolished as from 31st December, 1938, and land settlement was placed under the control of the Department of Lands and Survey. On 31st March, 1939, all Closer Settlement and Discharged Soldiers' accounts were amalgamated, the settlers' accounts adjusted and the new debt made payable over an extended period. As separate details are not now available, the following statement shows the operations under the provisions of the Closer Settlement Acts to 30th June, 1938 :—

**CLOSER SETTLEMENT : VICTORIA.**

(INCLUDING IRRIGATED AREAS.)

To 30th June—	Total Area Acquired.	Total Cost of Purchases. (a)	How Made Available for Settlement.					Number of Farms, etc.	Total Receipts (Land and Advances).	Repayments of Principal (Land and Advances).	Area Available for Settlement at 30th June.
			Farm Allotments.	Workmen's Homes Allotments.	Agricultural Labourers' Allotments.	Town Allotments. (b)	Roads and Reserves.				
	Acres.	£	Acres.	Acres.	Acres.	Acres.	Acres.	No.	£	£	Acres.
1938	1,402,568	10,244,023	1,162,676	790	3,484	86,599	14,775	8,722	14,297,492	4,779,268	1,006

(a) Includes value of Crown Lands taken over. Conditional Purchase Lease.

(b) Includes all land sold other than under

In the foregoing table the area and cost of land acquired for closer settlement purposes include, in addition to 133,128 acres purchased for £1,240,722 and transferred subsequently to discharged soldiers, a total area of 512,757 acres costing £4,125,822 which was purchased originally for the settlement of discharged soldiers.



4. **Queensland.**—Separate records relating to the closer settlement of re-purchased land are no longer kept by the Land Administration Board, and the operations under this heading are now included with "Leases and Licences under Land Acts." The total area acquired to 31st December, 1934, was 970,778 acres, costing £2,292,881. At the same date the area allotted amounted to 915,690 acres distributed over 3,048 selections, consisting of 2,155 agricultural farms, 257 unconditional selections, 544 perpetual lease selections, 9 prickly pear selections, 6 perpetual lease prickly pear selections and 77 settlement farm leases. An area of 13,038 acres was sold by auction.

5 **South Australia.**—The following table shows the area of land acquired for the purposes of closer settlement, and the manner in which it had been dealt with to 30th June, 1942 :—

#### CLOSER SETTLEMENT : SOUTH AUSTRALIA.

To 30th June—	Area of Lands Re- purchased (excluding land afterwards set apart for other purposes).	Agree- ments with Covenants to Purchase.	Total Area Leased as Homestead Blocks.		Perpetual Leases.	Mis- cellaneous Leases.	Sold.	Remainder Un- occupied (including roads and land in course of allotment).
			Right of Purchase.	Perpetual Lease.				
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1942 ..	830,758	433,900	48	1,374	79,806	17,179	276,486	21,965

The total area re-purchased at 30th June, 1942, was 925,301 acres at a cost of £2,887,638. Included in these figures are 64,766 acres purchased for £282,762 and afterwards set apart for discharged soldiers, 3,214 acres reserved for forest and waterworks purposes, the purchase-money being £16,185, and also 26,563 acres of swamp and other lands which were purchased for £111,580 in connexion with reclamation of swamp-lands on the River Murray. Of the total area, 808,793 acres have been allotted to 2,722 persons, the average area to each being 297 acres.

6. **Western Australia.**—The total area acquired for closer settlement up to 30th June, 1942, was 905,713 acres, costing £1,180,443. Of this area, 21,041 acres have been set aside for roads, reserves, etc., leaving a balance of 884,672 acres available for selection. Particulars of operations under the Act for the year ended 30th June, 1942, are as follows:—Area selected during the year 2,550 acres; number of farms, etc., allotted to date 1,652; total area occupied to date 775,187 acres; balance available for selection 109,485 acres; and total revenue £1,035,793.

7. **Tasmania.**—Up to 30th June, 1942, 37 areas had been opened up for closer settlement. The total purchase-money paid by the Government was £368,210 and the total area acquired amounted to 103,363 acres, including 12,053 acres of Crown Lands. The number of farms occupied at 30th June, 1942, was 271.

### § 8. Settlement of Returned Soldiers and Sailors.

1. **General.**—Information regarding the methods adopted in each State for providing land for the settlement of returned soldiers and sailors, together with the conditions under which such land could be acquired, is given in earlier issues of the Official Year Book (see No. 13, pp. 1016-23, and No. 18, pp. 187-9). Later modifications have been made with a view to simplifying procedure and liberalizing the conditions under which holdings may be acquired.

Particulars respecting the position of soldier settlement in each State at the latest available date are given in the following paragraphs.

2. **New South Wales.**—At 30th June, 1942, the area set apart for soldiers was 9,755,264 acres, of which 1,710,272 acres comprised acquired land purchased at a cost of £8,113,956. The number of settlers to whom farms, etc., had been allotted up to 30th June, 1942, was 9,705. Five thousand, two hundred and forty-nine soldiers have either transferred or abandoned their farms, leaving 4,456 in occupation of 6,546,224 acres, of which 5,224,372 acres were Crown lands (including 3,001,243 acres in the Western Division taken up under the Western Lands Act), 1,246,705 acres acquired lands, and 75,147 acres within Irrigation Areas. These totals exclude 703 discharged soldiers who purchased privately-owned land with their own capital and were granted advances for the purchase of stock and plant or for effecting improvements.

3. **Victoria.**—At 30th June, 1938, the area acquired or set apart for soldier settlement was 2,482,286 acres consisting of 1,763,241 acres of private land purchased at a cost of £13,361,266, 133,128 acres costing £1,246,722 taken over from Closer Settlement, and 585,917 acres of Crown lands valued at £447,622. Subsequently 512,757 acres valued at £4,125,822 were transferred to Closer Settlement. Up to 30th June, 1938, the number of settlers to whom farms, etc., had been allotted was 12,126, and the number of farms, etc., allotted was 9,784 (including 955 farms originally purchased for closer settlement purposes) containing 2,365,518 acres. In addition, 802 share farmers and holders of leasing agreements and private land had received assistance. The number of farms, etc., occupied at 30th June, 1938, was 8,426 (including 1,001 originally purchased for closer settlement) containing 1,734,379 acres. Later particulars cannot be given, as separate details are not available.

4. **Queensland.**—At 30th June, 1929, the area acquired or set apart for soldier settlement was 577,633 acres, of which 41,101 acres comprised private land, purchased at a cost of £270,480. The number of farms occupied was 1,148, containing 440,992 acres. Some of these selections were acquired under the ordinary provisions of the Land Act, and do not include areas specially set apart for soldiers.

As special records are not now kept respecting the areas held by discharged soldier settlers later information cannot be given.

5. **South Australia.**—At 30th June, 1942, the area of land acquired or set apart for soldier settlement was 1,336,612 acres, of which 1,202,653 acres comprised private land purchased at a cost of £3,863,572. These figures exclude mortgages discharged, £494,770 on 360,403 acres representing 300 farms, etc., and 314 settlers. The number of soldiers to whom assistance had been granted under the Discharged Soldiers' Settlement Acts up to 30th June, 1942, was 4,187, and the area of farms, etc. (including mortgages discharged), on which assistance had been granted was 2,746,744 acres. At 30th June, 1942, farms, etc., occupied numbered 1,695 containing 1,125,310 acres.

6. **Western Australia.**—At 30th June, 1942, the area of land acquired or set apart for soldier settlement was 14,287,643 acres, of which 345,110 acres comprised private land purchased at a cost of £605,076. Up to 30th June, 1942, assistance had been given to 5,213 returned soldiers, and the Agricultural Bank held 3,004 properties as security for advances. The area held, including pastoral leases, was approximately 25,830,000 acres, and advances approved amounted to £6,745,019. The number of farms, etc., occupied by returned soldiers at 30th June, 1942, was 1,206.

7. **Tasmania.**—At 30th June, 1942, the area acquired or set apart for soldier settlement was 342,886 acres, of which 273,522 acres comprised private land purchased at a cost of £2,072,298. Up to 30th June, 1942, the number of settlers to whom farms, etc., had been allotted was 2,380, and the number of farms, etc., allotted was 2,204 containing 342,886 acres. The number of farms, etc., occupied at 30th June, 1942, was 1,286 containing 287,761 acres.

8. **Losses on Soldier Settlements.**—(i) *General.* At the Premiers' Conference in Melbourne in 1917, it was agreed that the States should undertake the work of settling on the land returned soldiers and munition and war workers, and that the Commonwealth should raise the necessary loans for the States for this purpose.

The original arrangement provided that the Commonwealth should take the responsibility of finding up to £500 per settler as working capital for improvements, implements, seed, etc., an amount which was subsequently increased to £625, together with £375 per settler for resumptions and works incidental to land settlement approved by the Commonwealth. Loans were to be advanced to the settlers by the States at reasonable rates of interest not exceeding  $3\frac{1}{2}$  per cent. in the first year, increasing by  $\frac{1}{2}$  per cent. each subsequent year to the full rate of interest at which the money had been raised, plus working expenses, the difference between these rates and the cost of the money to the Government to be borne equally by the Commonwealth Government and the State Government. This provision respecting interest loss was not ultimately carried out as passed, the Commonwealth Government assuming responsibility for more than one-half of the interest loss, namely, a rebate of interest equal to  $2\frac{1}{2}$  per cent. per annum during a period of five years from the date of payment to the State of each instalment of loan money.

(ii) *Report by Mr. Justice Pike.* In addition to this expected loss of interest other losses have occurred in connexion with soldier settlement, and in 1927 Mr. Justice Pike, of the Land Valuation Court of New South Wales, was commissioned to report, not only on the losses, but on the principles on which financial responsibility should be divided. His report in 1929, to which reference should be made for fuller information, found that in all the negotiations concerning soldier settlement on the land the States insisted on undivided control, and that financial responsibility went along with control except so far as the Commonwealth definitely promised to give assistance. The undertaking of the Commonwealth to share equally with the States the cost of lower interest rates to soldier settlers was made the basis of a practical compromise, and the report recommended that the total loss should be shared equally between the two parties.

The gross losses were assessed at £23,525,522 distributed amongst the States as follows:—New South Wales, £7,003,950; Victoria, £7,721,891; Queensland, £1,853,315; South Australia, £3,565,829; Western Australia, £2,059,368; and Tasmania, £1,321,169. Other concessions granted by the Commonwealth Government increased its proportion of the losses to £12,333,000.

## § 9. Tenure of Land by Aliens.

Information regarding the terms and conditions under which land can be held by aliens is contained in earlier issues of the Official Year Book (see No. 18, pp. 190–1). All tenure of land by aliens is now subject to the following regulations:—National Security (Land Transfer) Regulations 1940; National Security (Economic Organization) Regulations, 1942.

## § 10. Advances to Settlers.

1. *General.*—A detailed statement regarding the terms and conditions governing advances to settlers in the several States and the Northern Territory appears in preceding issues of the Official Year Book (see No. 22, pp. 179–186).

In this section are summarized the loans and advances made by the various Government lending agencies in the States, including the transactions in lands acquired under closer and soldier settlement schemes. The balances owing on former Crown lands sold on the conditional purchase, etc., system, however, are not included.

The amounts outstanding do not represent the actual differences between the total advances and settlers' repayments, for considerable remissions of indebtedness have been made in all States as a result of reappraisements of land values and the writing down of debts.



2. New South Wales.—The following table gives particulars respecting advances, etc., under State Authorities to 30th June, 1942:—

## ADVANCES TO SETTLERS: NEW SOUTH WALES.

Advances.	Advances made during 1941-42.	Total Advances at 30th June, 1942.	Amount outstanding at 30th June, 1942.	
			Number of Loans Current.	£
Department of Lands—	£	£		
Closer and Soldier Land Settlement .. ..	..	15,112,982	8,390	11,379,994
Soldier Settlers .. ..	117	23,196,005	1,993	887,694
Wire Netting .. ..	3,310	1,494,646	3,566	370,154
Prickly Pear .. ..	4,492	143,113	527	16,958
Rural Bank—				
Rural Bank Department .. ..	694,704	36,617,837	14,857	15,468,266
Government Agency Department—				
Necessitous Farmers .. ..	235,781	6,850,880	4,132	1,550,769
Unemployment Relief and Dairy Promotion .. ..	22,318	1,359,126	3,872	734,882
Rural Reconstruction (b) .. ..	452,918	5,779,258	3,781	2,911,236
Shallow Boring .. ..	29,147	868,099	1,093	280,904
Irrigation Areas .. ..	71,728	(c)	(c)	1,626,824
Government Guarantee Agency .. ..	2,073	35,413	17	8,230
Closer Settlement Agency .. ..	2,209	166,826	123	166,772
Total .. ..	1,518,797	71,624,185	(d) 42,351	35,402,683

(a) In addition, the sum of £1,920,072 has been expended on developmental works on soldiers' settlements. (b) Includes Debt Adjustment, Drought Relief, and Marginal Wheat Areas Scheme, Advances (Commonwealth Moneys); amount outstanding £2,075,058. (c) Not available. (d) Incomplete.

3. Victoria.—The following table gives particulars respecting advances, etc., under State Authorities to 30th June, 1942:—

## ADVANCES TO SETTLERS: VICTORIA.

Advances.	Advances made during 1941-42.	Total Advances at 30th June, 1942.	Amount outstanding at 30th June, 1942.	
			Number of Persons.	£
Credit Foncier—	£	£		
Civilians .. ..	26,905	11,080,665	3,961	3,745,277
Discharged Soldiers .. ..	967	845,311	340	289,599
Treasurer—				
Cool Stores, Canneries, etc. .. ..	..	617,282	(a) 17	283,685
Department of Lands and Survey—				
Closer Settlement Settlers and Soldier Settlers .. ..	..	(c)		(b)
Cultivators of Land .. ..	127,842	46,904,855	9,440	12,355,627
Wire Netting .. ..	952	2,227,024	2,385	439,928
		569,381	(d)	177,903
Total .. ..	156,666	62,244,518	(e) 16,143	17,292,019

(a) Companies and Co-operative Societies. (b) Includes arrears of principal and interest, but excludes amounts written off debts and adjustments for revaluations. (c) Represents consolidated debts of settlers (Section 30, Act 4091). (d) Not available. (e) Incomplete.

4. **Queensland.**—The following table gives particulars of advances to 30th June, 1942. The figures exclude transactions in land.

### ADVANCES TO SETTLERS : QUEENSLAND.

Advances.	Advances made during 1941-42.	Total Advances at 30th June, 1942.	Amount outstanding at 30th June, 1942.	
			Number of Persons.	£
	£	£		
Bureau of Rural Development ..	231,199	8,769,968	4,317	1,699,576
Discharged Soldiers' Settlement (a) ..	2,043	2,457,941	1,317	418,386
Water Facilities .. ..	..	58,079	233	26,726
Wire Netting, etc. .. ..	175	1,019,289	3,145	372,732
Seed Wheat and Barley .. ..	1,644	(b) 121,688	(c)	13,601
Drought Relief .. ..	..	294,458	(c)	68,505
Income (Unemployment Relief and State Development) Tax Acts (d) ..	69,992	1,131,729	5,233	604,907
Irrigation .. ..	..	54,914	130	25,417
Farmers' Assistant (Debt Adjustment Acts.) .. ..	27,988	776,841	564	682,575
<b>Total .. ..</b>	<b>333,041</b>	<b>14,684,907</b>	<b>(e) 16,516</b>	<b>3,912,425</b>

(a) Includes advances to group settlers through the Lands Department, as well as advances through the Bureau of Rural Development. (b) Includes accrued interest. (c) Not available. (d) Largely for rural development (ringbarking, clearing, fencing, etc.). (e) Incomplete.

5. **South Australia.**—The following table gives particulars respecting advances, etc., under State Authorities to 30th June, 1942 :—

### ADVANCES TO SETTLERS : SOUTH AUSTRALIA.

Advances.	Advances made during 1941-42.	Total Advances at 30th June, 1942.	Amount outstanding at 30th June, 1942.		Arrears of Interest at 30th June, 1942.
			Number of Persons.	£	
	£	£			£
Department of Lands—					
Advances to soldier settlers ..	29,305	4,534,349	896	2,564,962	268,986
Advances to blockholders ..	..	41,451	1	3	..
Advances for sheds and tanks ..	..	75,692	254	26,184	5,369
Advances under Closer Settlement Acts .. ..	12,012	2,481,677	1,253	1,341,827	64,414
Advances under Agricultural Graduates Settlement Act .. ..	..	60,164	31	55,014	2,292
Farmers Assistance Board—					
Advances in drought-affected areas	6	2,112,669	1,070	477,716	82,200
Advances under Farmers Relief Acts .. ..	71,006	4,295,270	817	310,369	8,367
Irrigation Branch—					
Advances to civilians .. ..	3,540	281,294	388	103,485	42,232
Advances to soldier settlers ..	1,443	1,048,730	738	888,254	209,885
State Bank of South Australia (C. F. Department)	40,785	5,159,190	1,524	792,486	13,990
Advances to Primary Producers ..	17,626	1,049,401	384	922,706	7,140
Advances to settlers for improvements .. ..	2,120	923,634	3,158	193,865	42,312
Advances under Vermin and Fencing Acts .. ..	1,511	1,373,789	4,534	328,613	33,413
Advances under Loans to Producers Act .. ..	8,690	346,803	298	241,923	5,750
<b>Total .. ..</b>	<b>188,044</b>	<b>23,784,113</b>	<b>15,346</b>	<b>8,247,407</b>	<b>786,350</b>

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6. Western Australia.—The following table gives particulars respecting advances etc., under State Authorities to 30th June, 1942 :—

## ADVANCES TO SETTLERS : WESTERN AUSTRALIA.

Advances.	Advances made during 1941-42.	Total Advances at 30th June, 1942.	Amount outstanding at 30th June, 1942.	
			Number of Persons.	£
	£	£		
Development loans .. ..	69,118	10,403,844	6,064	4,826,390
Soldier settlement loans .. ..	..	26,096,812	3,004	3,656,664
Cropping advances .. ..	(b) 281,092	14,286,055	1,656	196,681
Group Settlement Advances .. ..	10,691	6,288,507	1,648	1,302,210
Repurchased Estates—				
Under A.L.P. Act 1909 .. ..	..	575,368	297	16,491
Soldier Settlement .. ..	..	605,076	726	40,047
Wire and Wire-netting Advances .. ..	701	513,051	2,534	422,017
<b>Total .. ..</b>	<b>361,602</b>	<b>38,768,713</b>	<b>15,929</b>	<b>10,460,500</b>

(a) Includes capitalization of interest to principal.  
Drought Relief Assistance and losses incurred.

(b) Includes all advances made under

7. Tasmania.—The following table gives particulars respecting advances under State Authorities to 30th June, 1942. Although not regarded as outstanding advances by the State Authority the figures in connexion with closer and soldier land settlement have been included in the table for comparative purposes; the areas so purchased have been leased on 99 year terms having an option of purchase which the leaseholder may exercise at any time.

## ADVANCES TO SETTLERS : TASMANIA.

Advances.	Advances made during 1941-42.	Total Advances at 30th June, 1942.	Amount outstanding at 30th June, 1942.	
			Number of Persons.	£
	£	£		
<b>Agricultural Bank—</b>				
State Advances Act and Rural Credits .. ..	76,929	1,153,990	1,155	291,154
Orchardists' Relief, 1926 .. ..	..	46,832	26	1,453
Unemployed (Assistance to Primary Producers) Relief Act 1930-1931 .. ..	..	114,302	626	29,054
Bush Fire Relief Act 1934 .. ..	..	14,855	64	1,724
Flood Sufferers' Relief Act 1929 .. ..	..	35,523	52	4,548
Crop Losses, 1934-35 .. ..	..	10,086	97	2,150
Assistance to Fruitgrowers Act 1941 .. ..	34,556	34,556	350	34,556
<b>Minister for Agriculture—</b>				
<b>Soldier Settlers—</b>				
Advances .. ..	6,604	846,062	1,209	(a) 43,795
Purchase of Estates, etc. (b) .. ..	8,809	2,497,658	(c) 1,286	1,021,568
<b>Closer Settlers—</b>				
Advances .. ..	1,326	91,410	207	16,741
Purchase of Estates, etc. (b) .. ..	27,350	507,359	(c) 271	287,038
<b>Total .. ..</b>	<b>155,574</b>	<b>5,352,633</b>	<b>5,343</b>	<b>1,733,781</b>

(a) Excludes £194,674 advances capitalized, £78,282 advances written off to bad debts, and £37,702 written off to revaluation. (b) Not regarded as outstanding advances by the State. (c) Number of leaseholders including those to whom advances have been made.



8. **Northern Territory.**—During the financial year 1941-42 no advance was made. The total amount advanced to 30th June, 1942, was £25,044 (approximately). The balance outstanding from 26 settlers, at 30th June, 1942, including interest, was £3,781.

9. **Summary of Advances.**—The following table gives a summary for each State and the Northern Territory to the 30th June, 1942. With the exception of Queensland, where the figures are incomplete, the particulars so far as they are available represent the total sums advanced to settlers including amounts spent by the various Governments in the purchase and improvement of estates disposed of by closer and soldier land settlement, while the amounts outstanding reveal the present indebtedness of settlers to the Governments, including arrears of principal and interest but excluding amounts written off debts and adjustments for land revaluations.

#### ADVANCES TO SETTLERS : AUSTRALIA.

State.	Advances made during 1941-42.	Total Advances at 30th June, 1942.	Amount outstanding at 30th June, 1942.	
			Number of Persons.	£
	£	£		
New South Wales .. .. .	1,518,797	71,624,185	42,351	35,402,683
Victoria .. .. .	156,666	62,244,518	16,143	17,292,019
Queensland .. .. .	333,041	14,684,907	16,516	3,912,425
South Australia .. .. .	188,044	23,784,113	15,346	8,247,407
Western Australia .. .. .	361,602	38,768,713	15,929	10,460,500
Tasmania .. .. .	155,574	5,352,633	5,343	1,733,781
Northern Territory .. .. .	..	25,044	26	3,781
Total .. .. .	2,713,724	216,484,113	111,654	77,052,596

### § 11. Alienation and Occupation of Crown Lands.

1. **General.**—The figures given in the previous parts of this chapter show separately the areas alienated, in process of alienation, or occupied under various tenures. The following tables set out in summarized form the position in regard to the tenure of land in each State, in the Northern Territory, and in the Australian Capital Territory during the latest year for which information is available. Particulars for each year from 1931 onward appear in *Production Bulletin*, No. 35, Part II., page 5. The area unoccupied includes roads, permanent reserves, forests, etc. In some cases, lands which are permanently reserved from alienation are occupied under leases and licences, and have been included therein. Lands occupied under leases or licences for pastoral purposes are frequently held on short tenures only, and could thus be made available for settlement practically whenever required.

2. **New South Wales.**—Of the total area of New South Wales, 25.7 per cent. had been alienated at 30th June, 1942, 8.8 per cent. was in process of alienation, 57.5 per cent. was held under leases and licences, and the remaining 8.0 per cent. was unoccupied or held by the Crown.

The following table gives particulars for the year ended 30th June, 1942 :—

ALIENATION AND OCCUPATION OF CROWN LANDS : NEW SOUTH WALES,  
30th JUNE, 1942.

Particulars.	Acres.	Particulars.	Acres.
<i>1. Alienated.</i>		<i>3. Held under Leases and Licences.</i>	
Granted and sold prior to 1862 ..	7,146,579	Homestead selections and grants ..	1,659,786
Sold by auction and other sales, 1862 to date ..	15,139,186	Alienable leases, long-term and perpetual ..	26,444,146
Conditionally sold, 1862 to date ..	30,866,581	Other long-term leases ..	78,973,461
Granted under Volunteer Land Regulations, 1867 to date ..	172,198	Short-term leases and temporary tenures ..	4,377,768
Granted for public and religious purposes ..	261,081	Forest leases and occupation permits ..	2,230,343
	53,585,625	Mining leases and permits (a) ..	192,013
Less lands resumed or reverted to Crown ..	2,741,735		
Total ..	50,843,890	Total ..	113,877,517
<i>2. In Process of Alienation.</i>		<i>4. Unoccupied (b), Particulars of Lord Howe Island not being available the area, 3,220 acres, is included under unoccupied, (Approximate) ..</i>	
Conditional purchases ..	14,089,201		15,774,964
Closer settlement purchases ..	2,900,914		
Soldiers' group purchases ..	405,704		
Other forms of sale ..	144,910		
Total ..	17,540,729		

Area of State—198,037,100 acres.

(a) At 31st December, 1941. (b) Of this area only 3,206,862 acres are available for selection, the balance being reservations for roads, various public purposes, water frontages, and river and lake surfaces.

3. Victoria.—The total area of Victoria is 56,245,800 acres, of which 50.5 per cent. had been alienated up to the end of 1941; 9.6 per cent. was in process of alienation under deferred payments and closer settlement schemes; 15.7 per cent. was occupied under leases and licences; and 24.2 per cent. was unoccupied or held by the Crown.

The following table shows the distribution :—

ALIENATION AND OCCUPATION OF CROWN LANDS : VICTORIA,  
31st DECEMBER, 1941.

Particulars.	Acres.	Particulars.	Acres.
<i>1. Alienated</i> .. ..	28,421,310	<i>3. Leases and Licences held—</i>	
<i>2. In Process of Alienation—</i>		Under Lands Department—	
Exclusive of Mallee and Closer Settlement Lands ..	891,902	Perpetual Leases ..	85,557
Mallee Lands (exclusive of Closer Settlement Lands) ..	3,926,927	Other Leases and Licences Temporary (Yearly) Grazing Licences ..	22,967
Closer Settlement Lands ..	564,632	Under Mines Department ..	8,152,667
Village Settlements ..	37		577,446
		Total ..	8,838,637
Total .. ..	5,383,498	<i>4. Occupied by the Crown or Unoccupied (a) ..</i>	13,602,355

Total area of State—56,245,800 acres.

(a) These Crown lands comprise reservations for roads and various public purposes, 8,206,724 acres; water frontages, beds of rivers, lakes, etc., and unsold land in cities, towns and boroughs, 4,036,841 acres; and other lands (unoccupied) 1,358,790 acres.

4. **Queensland.**—The total area of this State is 429,120,000 acres, of which, on 31st December, 1941, 5.0 per cent. was alienated; 1.5 per cent. was in process of alienation; and 79.9 per cent. was occupied under leases and licences. The remainder, 13.6 per cent., was either unoccupied or held as reserves or for roads.

The distribution is shown in the following table :—

**ALIENATION AND OCCUPATION OF CROWN LANDS : QUEENSLAND,  
31st DECEMBER, 1941.**

Particulars.	Acres.	Particulars.	Acres.
<b>1. Alienated—</b>		<b>3. Occupied under Leases and Licences—</b>	
By Purchase .. ..	21,311,862	Pastoral Leases .. ..	243,204,120
Without Payment .. ..	92,074	Occupation Licences .. ..	7,182,320
		Grazing Selections and Settlement Farm Leases .. ..	82,843,702
		Leases—Special Purposes .. .. (a)	987,148
		Under Mines Department .. ..	438,103
		Perpetual Lease Selections and Perpetual Lease Prickly Pear Selections .. ..	6,321,013
		Auction Perpetual Leases, etc. .. ..	28,558
		Prickly Pear Leases .. ..	23,960
		Forest Grazing Leases (or Reserves) .. ..	1,774,440
<b>Total .. ..</b>	<b>21,403,936</b>	<b>Total .. ..</b>	<b>342,803,364</b>
<b>2. In Process of Alienation .. ..</b>	<b>6,421,943</b>	<b>4. Reserves, (Net, not leased), Surveyed Roads and Surveyed Stock Routes .. ..</b>	<b>18,963,699</b>
		<b>5. Unoccupied .. ..</b>	<b>39,527,058</b>

Total area of State—429,120,000 acres.

(a) Special leases of Crown Land 473,035 acres; special leases of Reserves 514,113 acres.

5. **South Australia.**—The area of South Australia is 243,244,800 acres and at 30th June, 1942, 5.2 per cent. was alienated; 0.6 per cent. in process of alienation; 53.9 per cent. occupied under leases and licences; and 40.3 per cent. unoccupied or occupied by the Crown.

The subjoined table shows the distribution :—

**ALIENATION AND OCCUPATION OF CROWN LANDS : SOUTH AUSTRALIA,  
30th JUNE, 1942.**

Particulars.	Acres.	Particulars.	Acres.
<b>1. Alienated—</b>		<b>3. Held under Lease and Licence—</b>	
Sold .. ..	12,539,374	Right of Purchase Leases .. ..	304,172
Granted for Public Purposes .. ..	134,398	Perpetual Leases, including Irrigation Leases .. ..	16,741,795
		Pastoral Leases .. ..	110,857,084
		Other Leases and Licences .. ..	3,062,067
		Mining Leases and Licences .. ..	70,463
<b>Total .. ..</b>	<b>12,673,772</b>	<b>Total .. ..</b>	<b>131,035,581</b>
<b>2. In process of Alienation .. ..</b>	<b>1,479,424</b>	<b>4. Area Unoccupied (a) .. ..</b>	<b>98,056,023</b>

Total area of State—243,244,800 acres.

(a) Includes surveyed roads, railways and other reserves, 20,202,030 acres; salt water lakes and lagoons, 7,680,000 acres; and fresh water lakes, 224,000 acres.

6 **Western Australia.**—The total area of Western Australia is 624,588,800 acres, of which, at 30th June, 1942, 3.0 per cent. was alienated; 2.1 per cent. was in process of alienation; and 33.9 per cent. was occupied under leases and licences issued either by the Lands or the Mines Departments. The balance of 61.0 per cent. was unoccupied.



The following table shows the distribution :—

ALIENATION AND OCCUPATION OF CROWN LANDS : WESTERN AUSTRALIA,  
30th JUNE, 1942.

Particulars.	Acres.	Particulars.	Acres.
1. Alienated .. ..	18,592,104	3. Leases and Licences in Force—	
2. In process of Alienation—		(i) Issued by Lands Department—	
Midland Railway Concessions	54,800	Pastoral Leases ..	206,639,071
Free Homestead Farms ..	562,622	Special Leases ..	990,808
Conditional Purchases ..	5,259,261	Leases of Reserves ..	1,279,006
Selections from the late W. A. Company	5,297	Residential Lots ..	5,180
Selections under the Agricultural Lands Purchase Act	452,869	(ii) Issued by Mines Department—	
Homestead or Grazing Leases	6,919,530	Gold-mining Leases ..	23,656
Poison Land Leases or Licences	14,742	Mineral Leases ..	38,498
Town and Suburban Lots ..	2,682	Miners' Homestead Leases ..	30,314
		(iii) Issued by Forests Department—	
		Timber Permits ..	2,529,167
Total .. ..	13,271,803	Total .. ..	211,535,790
		4. Area Unoccupied (a) ..	381,189,103

Total area of State—624,588,800 acres.

(a) Includes reservations for roads and various public purposes, 49,220,825 acres.

7. Tasmania.—At the end of 1941, 35.4 per cent of the total area had been alienated ; 2.5 per cent. was in process of alienation ; 16.6 per cent. was occupied under leases and licences for either pastoral, agricultural, timber, or mining purposes. or for closer or soldier settlement; the remainder (45.5 per cent.) was unoccupied or reserved by the Crown.

The following table shows the distribution :—

ALIENATION AND OCCUPATION OF CROWN LANDS : TASMANIA,  
31st DECEMBER, 1941.

Particulars.	Acres.	Particulars.	Acres.
1. Alienated .. ..	5,931,231	3. Leases and Licences—continued.	
2. In Process of Alienation ..	416,440	(i) Issued by Lands Department—continued.	
3. Leases and Licences—		Soldier Settlement ..	106,000
(i) Issued by Lands Department—		Short-Term Leases ..	131,000
Islands .. ..	147,248	Other .. ..	21,280
Ordinary Leased Land ..	1,956,566	(ii) Issued by Mines Department ..	27,013
Land Leased for Timber	320,627	Total .. ..	2,789,734
Closer Settlement ..	80,000	4. Area Occupied by the Crown or Unoccupied (a) .. ..	7,640,595

Total area of State—16,778,000 acres.

(a) Includes reservations for roads and various public purposes, 2,815,562 acres.

8. Northern Territory.—The area of the Northern Territory is 335,116,800 acres, of which, at 30th June, 1942, only 0.1 per cent. was alienated ; 39.9 per cent. was held under leases and licences ; 13.3 per cent. was reserved for aboriginal, defence and public requirements ; and the remaining 46.7 per cent. was unoccupied.

The following shows the mode of occupancy of areas at 30th June, 1942 :—

**ALIENATION AND OCCUPATION OF CROWN LANDS : NORTHERN TERRITORY,  
30th JUNE, 1942.**

Particulars.						Acres.
1. Alienated	..	..	..	..	..	477,585
2. Leased—						
Pastoral Leases	..	..	..	..	..	105,564,960
Other leases, licences and mission stations	..	..	..	..	..	27,993,269
Total	..	..	..	..	..	133,558,229
3. Reserves—						
Aboriginal, defence and public requirements	..	..	..	..	..	44,315,432
4. Unoccupied and Unreserved	..	..	..	..	..	156,765,554
5. Total area	..	..	..	..	..	335,116,800

9. Australian Capital Territory.—Particulars of the alienation and occupation of Crown lands in the Territory (excluding Jervis Bay area) for 1942 are as follows :— Alienated 56,260 acres; in process of alienation 50,676 acres; land leased for grazing, agriculture, etc., 310,361 acres; land otherwise occupied including City Area Tenures 27,835 acres; and unoccupied 137,668 acres. The area of acquired lands was 213,878 acres. The total area of the Territory (excluding Jervis Bay area, 18,000 acres) is approximately 582,800 acres.

Alienated land at the end of 1942 comprised 9.4 per cent. of the total area, land in process of alienation 8.4 per cent., land held under lease 51.7 per cent., and unoccupied land 30.5 per cent. of the total area.

10. Summary.—The following table gives a summary for each State and Territory of the alienation and occupation of Crown lands :—

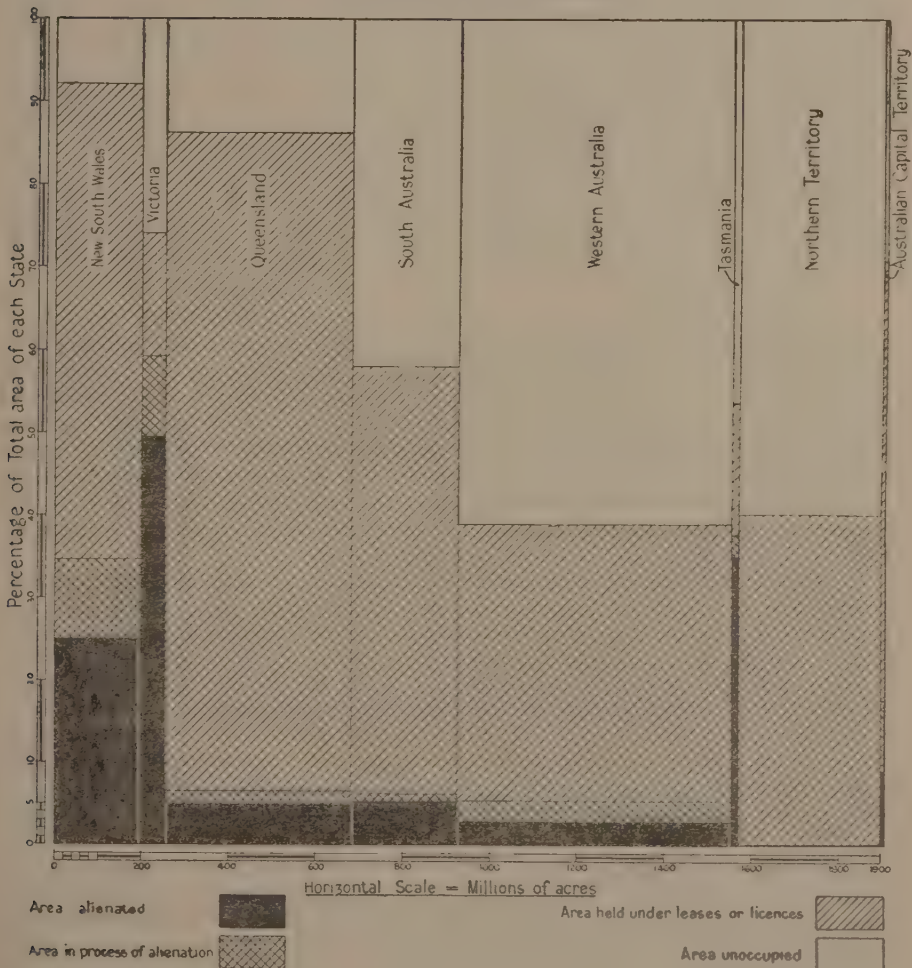
**ALIENATION AND OCCUPATION OF CROWN LANDS : AUSTRALIA,  
31st DECEMBER, 1941.**

State or Territory.	Private Lands.				Crown Lands.				Total Area.
	Alienated.		In Process of Alienation.		Leased or Licensed.		Other.		
	Acres.	%	Acres.	%	Acres.	%	Acres.	%	
N.S.W. (a)	50,843,890	25.67	17,540,729	8.86	113,877,517	57.50	15,774,964	7.97	198,037,100
Vic. ..	28,421,310	50.53	5,383,498	9.57	8,838,637	15.72	13,602,355	24.18	56,245,800
Qld. ..	21,403,936	4.99	6,421,943	1.50	342,803,364	79.88	58,490,757	13.63	429,120,000
S. Aust. (a)	12,673,772	5.21	1,479,424	0.61	131,035,581	53.87	98,056,023	40.31	243,244,800
W. Aust.(a)	18,592,104	2.98	13,271,803	2.12	211,535,790	33.87	381,189,103	61.03	624,588,800
Tas. ..	5,931,231	35.35	416,440	2.48	2,789,734	16.63	7,640,595	45.54	16,778,000
N.T. (a) ..	477,585	0.14	..	..	133,558,229	39.86	201,080,986	60.00	335,116,800
A.C.T. ..	56,260	9.36	50,676	8.44	319,469	53.17	174,395	29.03	600,800
Aust. ..	138,400,088	7.27	44,564,513	2.34	944,758,321	49.63	776,009,178	40.76	1,903,732,100

(a) At 30th June, 1942.

**II. Diagram showing Condition of Public Estate.**—The following diagram shows the condition of the public estate at 31st December, 1939. The square itself represents the total area of Australia, while the relative areas of individual States are shown by the vertical rectangles. The areas alienated from the State; those in process of alienation under various systems of deferred payments; and the areas held under leases or licences are indicated by the differently shaped areas as described in the reference given below the diagram, and the areas unoccupied are left unshaded.

### TENURE OF LAND





## CHAPTER V. TRANSPORT AND COMMUNICATION.

### A. SHIPPING.

#### § 1. General.

By reason of the war-time need for economy in the use of paper, and the censorship of statistics the Section relating to Shipping has been omitted from this issue. Particulars up to year 1938-39 may be found in the Official Year Book No. 34, pp. 81 to 93.

### B. RAILWAYS.

#### § 1. General.

1. **Introduction.**—The policy of Government ownership and control of railways has been adopted in each State and at 30th June, 1942, only 721 route miles of the 27,962 open for general traffic in Australia were privately owned. Those owned by the State Governments amounted to 25,040 miles, and those owned by the Commonwealth, 2,201 miles. In the following tables details of the four lines owned by the Commonwealth are grouped and shown with the totals for the various State-owned systems. Separate particulars for each Commonwealth line are given in *Transport and Communication Bulletin* No. 33, issued by this Bureau, and also in Official Year Book No. 31, p. 125 *et seq.*

2. **Railway Communication in Australia.**—An account of the progress of railway construction in Australia since the opening of the first line in 1854 will be found in Official Year Book No. 6, p. 681. Further information regarding railway communication in Australia and proposals for unification of gauge in the various systems are given in Official Year Book No. 22, pp. 259-61.

#### 3. Government Railways. Lines under Construction and Lines Authorized, 1942.—

(i) *Lines under Construction.* In spite of the great extensions of State railways since 1875 and also the construction of various railways by the Commonwealth Government, there are still, in some States, immense areas of country which are as yet practically undeveloped, and in which little in the nature of permanent settlement has been accomplished. The general policy of the States was to extend the existing lines inland in the form of light railways as settlement increased, and while it is true that lines which were not likely to be commercially successful in the immediate future have been constructed from time to time for the purpose of encouraging settlement, the general principle that the railways should be self-supporting was kept in view.

(a) *New South Wales.* The Sutherland to Cronulla (6.31 miles) and Bungendore to Captain's Flat (21.14 miles) lines were opened in December, 1939, and June, 1940, respectively. Construction work on the Sandy Hollow to Maryvale line (approximately 147 miles) and on the connecting link between St. James and Wynyard stations of the underground railway of Sydney has practically ceased for the time being. Work was continued on the new Hawkesbury River railway bridge and approach tunnels, although retarded by the withdrawal of men and plant for urgent defence works. The duplication of track on the main Southern line between Cootamundra and Junee has made good progress, and some preliminary work has been done in connexion with the long range scheme for the quadruplication of tracks on the main Western line between Lidcombe and Penrith.

(b) *Victoria.* In May, 1942, 15.75 miles of line from Nowingi (Mildura line) towards Millewa South were opened. Traffic is being conducted as far as Kaorkee (14.25 miles) on the Euston to Lette (30.25 miles) railway in New South Wales territory, but beyond this point construction has been suspended.

(c) *Queensland.* In previous issues of the Official Year Book details are given of the scheme of railway construction under the provisions of the North Coast Railway Act 1910 (see Official Year Book No. 15, p. 551). The following lines are partially constructed, but no work has been done thereon for a number of years:—Morganville to Kalliwa Creek (12 miles); Yaraka to Powell's Creek (27 miles); Dajarra to Moonah Creek (41 miles); Lawgi to Monto (54 miles); and Winton to 37-Mile (37 miles); a total of 171 miles.

(d) *Other.* At 30th June, 1942, no construction work on new lines was in progress in South Australia, Western Australia, Tasmania, nor for the Commonwealth Government.

(ii) *Lines Authorized for Construction.* (a) *New South Wales.* At 30th June, 1942, the following lines had been authorized for construction but not commenced:—Gilgandra to Collie (21.54 miles); Jerilderie towards Deniliquin (25 miles); Rand to Bull Plain (27.55 miles); Canowindra to Gregra (33.87 miles); St. Leonards to Eastwood (9.07 miles); Inverell to Ashford (32 miles); Gwabegar to Burren Junction (36.25 miles); Gwabegar to Pilliga (18.50 miles); Eastern Suburbs to Bondi (7.75 miles); and Western Suburbs to Western Road (5.55 miles); a total distance of 217.08 miles.

(b) *Victoria.* The following lines were authorized, but construction had not been commenced up to the end of June, 1942:—5 ft. 3 in. gauge: La La Siding to Big Pat's Creek (2.50 miles); Casterton to Nangeela (9 miles); and Orbost to Brodribb (6 miles). Under the Border Railways Act 1922, the Mildura to Gol Gol (22 miles) line has been authorized for construction in New South Wales.

(c) *Queensland.* In addition to the new lines upon which some work has been done Parliament has authorized the construction of the following parts of the Great Western Railway: Section A, from Quilpie to Eromanga (120 miles); Section B, from Powell's Creek (224 miles); Section C, from 37-Mile to Springvale (324 miles); and Section D, from Moonah Creek (216 miles). The following lines were also authorized for construction: Texas to Silverspur (9 miles); Mount Edwards to Maryvale (28 miles); Lanefield to Rosevale (17 miles); Gatton to Mount Sylvia (11 miles); Wandoo to Taroom (42 miles); Dirranbandi extension (52 miles); Yarraman to Nanango (16 miles); Brooloo to Kenilworth (10 miles); Dobbryn to Myally Creek (50 miles); and Perramon towards Boongee (11 miles).

(d) *South Australia.* Parliament has authorized the construction of a line on the 3 ft. 6 in. gauge from Kielpa to Mangalo Hall (26.25 miles). The survey has been completed, but the work cannot be started without a special resolution of both Houses of Parliament.

(e) *Western Australia.* The following lines were authorized for construction up to 30th June, 1942:—Yarramony to Merredin (85 miles); Brookton to Dale River (28 miles); Boyup Brook to Cranbrook (95.23 miles); Manjimup to Mount Barker (107 miles); Leighton to Robb's Jetty (4.62 miles); Southern Cross—Southwards (27.38 miles); Yuna to Dartmoor (52 miles); a total distance of 399.23 miles. The surveys have been completed in respect of all the above lines, except the Boyup Brook to Cranbrook, the Manjimup to Mount Barker, and the Leighton to Robb's Jetty lines.

(f) *Other.* There were no new railways authorized in Tasmania nor for the Commonwealth Government at 30th June, 1942.

4. *Grafton-South Brisbane (Uniform Gauge) Line.*—The line from Grafton (New South Wales) to Brisbane (Queensland) which was opened for traffic on 27th September, 1930, was constructed to overcome the break of gauge between Sydney and Brisbane; and was the first step towards uniform gauge railway communication between the capitals of the mainland States. To 30th June, 1942, the capital cost of construction and equipment was £4,362,500, the interest charge for the year 1941-42 being £225,939. During the same period, the working of the line, which is the responsibility of the New South Wales and Queensland Railway Commissioners, resulted in a profit of £102,617 being shown on the New South Wales section and a profit of £210,244 on the Queensland section. The following amounts were payable as interest—New South Wales, £72,179, and Queensland, £27,029, the remainder, £126,731, being borne by the Commonwealth. Figures relating to the operations, etc., of the line are incorporated as far as possible with those for New South Wales and Queensland in the tables which follow. Further particulars of the construction of the line will be found in Official Year Book, No. 31, p. 122.

5. *Mileage Open for Traffic, all Lines.*—(i) *General.* Almost all the railways open for general traffic in Australia are owned and controlled by the State or Commonwealth Governments. Private lines have been laid down for the purpose of opening up forest lands, mining districts or sugar areas. These lines are not generally used for the

conveyance of passengers or the public conveyance of goods, and it should be understood that the private lines included in the tables below form only a small part of all private railways in Australia.

The following table shows the route mileage of Commonwealth, State and private lines open for general traffic in each State for each of the years 1937-38 to 1941-42 :—

#### GOVERNMENT AND PRIVATE RAILWAYS : MILEAGE OPEN.

State or Territory.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	Miles.	Miles.	Miles.	Miles.	Miles.
New South Wales ..	6,204.02	6,210.72	6,210.30	6,196.16	6,194.83
Victoria ..	4,745.71	4,783.91	4,783.83	4,783.83	4,790.81
Queensland ..	6,779.04	6,750.04	6,750.04	6,750.04	6,750.04
South Australia ..	3,860.67	3,860.67	3,860.67	3,860.73	3,860.73
Western Australia ..	5,106.82	5,108.73	5,112.29	5,112.45	5,112.45
Tasmania ..	782.55	789.55	760.76	758.28	758.28
Northern Territory ..	489.73	489.73	489.73	489.73	489.73
Aust. Cap. Territory ..	4.94	4.94	4.94	4.94	4.94
Australia ..	27,973.48	27,998.29	27,972.56	27,956.16	27,961.81

In previous issues of the Official Year Book particulars of mileage open are given for different periods from 1855 onwards. (See No. 15, p. 537.)

(ii) *Government and Private Lines Separately.* The next table shows for each State (a) the length of lines open for traffic owned by the State Government, and by the Commonwealth Government in that State and ; (b) the length of private lines available for general use by the public :—

#### GOVERNMENT AND PRIVATE RAILWAYS : MILEAGE CLASSIFIED, 1941-42.

State or Territory.	Government Lines—		Private Lines available for General Traffic.	Total Open for General Traffic.
	State.	Commonwealth.		
	Miles.	Miles.		
New South Wales ..	6,126.74	..	68.09	6,194.83
Victoria ..	4,765.87	..	24.94	4,790.81
Queensland ..	6,566.65	..	183.39	6,750.04
South Australia ..	2,557.44	1,252.39	50.90	3,860.73
Western Australia ..	4,381.46	453.99	277.00	5,112.45
Tasmania ..	641.94	..	116.34	758.28
Northern Territory ..	..	489.73	..	489.73
Aust. Cap. Territory ..	..	4.94	..	4.94
Australia ..	25,040.10	2,201.05	720.66	27,961.81

6. *Comparative Railway Facilities.*—The mileage of line open to the public for general traffic (including both Government and private lines) is shown in the following statement in relation to both population and area at 30th June, 1942 :—

#### GOVERNMENT AND PRIVATE RAILWAYS : COMPARISON OF FACILITIES, 1941-42.

Particulars.	N.S.W.	Vic.	Q'd.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Mileage of Railway—									
Per 1,000 of population..	2.19	2.43	6.50	6.36	10.87	3.16	54.90	0.40	3.90
Per 1,000 sq. miles of Territory ..	20.02	54.51	10.07	10.16	5.24	28.93	0.94	5.26	9.40



7. Classification of Lines according to Gauge, 1941-42.—The next table gives a classification according to gauge of the route mileage open of (i) Commonwealth railways, given in the State or Territory in which situated; (ii) State railways; and (iii) Private railways open to the public for general traffic. Particulars of Government railways are up to 30th June, 1942, and of private railways open for general traffic to 31st December, 1942, as nearly as possible.

## GOVERNMENT AND PRIVATE RAILWAYS : GAUGES, 1941-42.

State or Territory in which situated.	Route mileage having a gauge of—					Total.
	5 ft. 3 in.	4 ft. 8½ in.	3 ft. 6 in.	2 ft. 6 in.	2 ft. 0 in.	

## COMMONWEALTH RAILWAYS.

	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
South Australia ..	..	654.21	598.18	..	..	1,252.39
Western Australia ..	..	453.99	..	..	..	453.99
Northern Territory ..	..	..	489.73	..	..	489.73
Aust. Cap. Territory	..	4.94	..	..	..	4.94
Total ..	..	1,113.14	1,087.91	..	..	2,201.05

## STATE RAILWAYS.

New South Wales ..	..	6,126.74	..	..	..	6,126.74
Victoria ..	4,644.10	..	..	121.77	..	4,765.87
Queensland ..	..	68.82	6,467.57	..	30.26	6,566.65
South Australia ..	1,480.55	..	1,076.89	..	..	2,557.44
Western Australia ..	..	..	4,381.46	..	..	4,381.46
Tasmania ..	..	..	641.94	..	..	641.94
Total ..	6,124.65	6,195.56	12,567.86	121.77	30.26	25,040.10

## PRIVATE RAILWAYS OPEN FOR GENERAL TRAFFIC.

New South Wales ..	..	31.36	36.73	..	..	68.09
Victoria ..	13.94	..	(a) 11.00	..	..	24.94
Queensland ..	..	..	80.87	..	102.52	183.39
South Australia ..	..	..	50.90	..	..	50.90
Western Australia ..	..	..	277.00	..	..	277.00
Tasmania ..	..	..	109.84	..	6.50	116.34
Total ..	13.94	31.36	566.34	..	109.02	720.66

## ALL RAILWAYS OPEN FOR GENERAL TRAFFIC.

New South Wales ..	..	6,158.10	36.73	..	..	6,194.83
Victoria ..	4,658.04	..	(a) 11.00	121.77	..	4,790.81
Queensland ..	..	68.82	6,548.44	..	132.78	6,750.04
South Australia ..	1,480.55	654.21	1,725.97	..	..	3,860.73
Western Australia ..	..	453.99	4,658.46	..	..	5,112.45
Tasmania ..	..	..	751.78	..	6.50	758.28
Northern Territory ..	..	..	489.73	..	..	489.73
Aust. Cap. Territory	..	4.94	..	..	..	4.94
GRAND TOTAL	6,138.59	7,340.06	14,222.11	121.77	139.28	27,961.81

(a) 3 ft. 0 in. gauge.

8. **Summary of Operations, 1941-42.**—In the following table a summary is given of the working of all railways open for general traffic in Australia during the year ended 30th June, 1942. In order to provide more accurate averages the basis of compilation has been altered in respect of the following items :—Capital cost per mile open, gross revenue, working expenses and net revenue per train mile run (private railways only), and average wages. The comparison with figures published in previous issues is thereby impaired :—

**GOVERNMENT AND PRIVATE RAILWAYS : SUMMARY OF OPERATIONS, 1941-42.**

Particulars.	Commonwealth Railways.	State Railways.	Private Railways. (a)	Total for Australia.
Mileage open (route) 30th June, 1942 .. .. miles	2,201.05	25,040.10	720.66	27,961.81
Capital cost .. .. £	17,433,858	306,112,131	4,724,515	328,270,504
Cost per mile .. .. £	7.921	12.225	8.042	11.796
Gross revenue .. .. £	2,195,304	64,286,434	726,074	67,207,812
" " per train-mile d.	226.91	179.11	173.21	180.28
Working expenses .. .. £	1,506,799	49,536,295	485,158	51,528,252
" " per train-mile d.	155.74	138.01	115.74	138.22
Net revenue .. .. £	688,505	14,750,139	240,916	15,679,560
" " per train-mile d.	71.17	41.10	54.47	42.06
Train-miles run .. .. miles	2,321,920	86,142,768	1,131,276	89,595,964
Passenger-journeys .. .. No.	332,305	175,117,527	1,099,014	476,548,846
Tons of goods, etc., carried .. .. tons	326,236	38,613,547	3,727,807	42,667,590
Average number of employees No. (b)	2,405	112,206	1,158	115,769
" wage .. .. £	381	324	287	325

(a) Incomplete. Particulars not available for all items.

(b) Excludes Construction Staff.

(c) Employees at 31st December, 1942.

Details shown above relating to Capital Cost do not include particulars of amounts, totalling about £61.5 million, written off during the past fifteen years. If these are taken into account, the cost per mile for State Railways is increased to £14.681 and for all Railways to £14.007.

## § 2. Government Railways.

1. **Cost of Construction and Equipment.**—The following table gives particulars of the mileage open and the capital cost of Government railways in Australia. The cost shown for Australia (£323,545,989) does not represent the total expenditure on construction and equipment, as in Victoria, Queensland, South Australia and Tasmania, legislation has been introduced for the purpose of reducing the capital indebtedness of the railways. Figures relating to capital cost do not include charges for works in the course of construction, surveys, discounts and flotation charges on loans allocated to the railways.

**GOVERNMENT RAILWAYS : MILEAGE AND COST TO 30TH JUNE, 1942.**

System.	Mileage Open.		Total Cost of Construction and Equipment.	Average Cost per Route-Mile Open.	Cost per Head of Population.	Route Mileage per 1,000 of Population.
	Route.	Track.				
	Miles.	Miles.	£	£	£	Miles.
New South Wales	6,126.74	8,276.68	150,661,127	24,591	53.26	2.17
Victoria (a) ..	4,765.87	6,145.91	52,718,195	11,062	26.78	2.42
Queensland (a) ..	6,566.65	7,437.00	38,827,199	5,913	37.41	6.33
South Australia (a)	2,557.44	3,136.54	30,801,278	12,044	50.72	4.21
Western Australia	4,381.46	4,839.65	26,393,048	6,024	56.11	9.32
Tasmania (a) ..	641.94	694.00	2,348,784	3,659	9.79	2.68
Commonwealth ..	2,201.05	2,323.78	17,433,858	7,921	..	..
Australia (a) ..	27,241.15	32,853.56	323,545,989	11,877	45.10	3.80

(a) See below.

(b) Includes Grafton-South Brisbane Line, £4,362,500.

The reductions made in the capital indebtedness referred to above were:—Victoria, £25,684,423; Queensland, £28,000,000; South Australia, £3,088,986; and Tasmania, £4,738,000. After adding these figures to the capital costs of the respective States and adjusting the route-mileage for New South Wales and Queensland to exclude portions of the Grafton-South Brisbane Line, the cost per route-mile open in each State and for the Commonwealth railways is as follows:—New South Wales, £24,459; Victoria, £16,451; Queensland, £10,285; South Australia, £13,252; Western Australia, £6,024; Tasmania, £11,040; Commonwealth, £7,921; and for all Government railways in Australia, £14,082. The lowest average cost is in Western Australia, and the highest is in New South Wales. Very few engineering difficulties were encountered in Western Australia, and the fact that contractors were permitted to carry traffic during the term of their contract considerably reduced expenditure.

Adjusted figures for the cost per head of population for each State and for Australia are as follows:—New South Wales, £52.75; Victoria, £39.82; Queensland, £64.39; South Australia, £55.81; Western Australia, £56.11; Tasmania, £29.54; all Government railways in Australia, £53.47.

2. **Expenditure on Construction and Equipment from Revenue and from Loans:—** The following table gives particulars of the expenditure on construction and equipment from revenue and from loans:—

**GOVERNMENT RAILWAYS : CAPITAL EXPENDITURE FROM REVENUE  
AND FROM LOANS.**

System.	Expenditure from Revenue to 30th June, 1942.	Net Loan Expenditure.			
		1939-40.	1940-41.	1941-42.	Total to 30th June, 1942.
	£	£	£	£	£
New South Wales ..	666,864	1,546,461	1,297,641	1,680,050	155,590,757
Victoria ..	a 6,133,193	(b) 865,500	(b) 641,845	(b) 740,271	b 78,236,053
Queensland ..	..	500,995	529,512	95,345	66,222,708
South Australia ..	..	176,084	188,722	344,673	35,468,206
Western Australia ..	633,808	(c) 99,180	(c) 98,235	25,394	25,706,927
Tasmania ..	18,121	29,866	33,575	40,109	(d) 7,410,549
Commonwealth ..	2,687,877	Cr. 286	Cr. 2,240	Cr. 17,656	11,413,023
<b>Australia ..</b>	<b>10,139,863</b>	<b>3,217,800</b>	<b>2,787,290</b>	<b>2,908,186</b>	<b>138,249,228</b>

(a) From proceeds of sale of State lands, Consolidated Revenue Fund, National Recovery Loan, etc.  
 (b) Gross Loan Expenditure. (c) Includes expenditure on railways provided in Unemployment Relief Work programmes. (d) Includes Losses funded. (e) Includes £2,446,005 Commonwealth Loan Expenditure on Grafton-South Brisbane Line.

3. **Gross Revenue.**—(i) *General.* The total revenue from all sources, the revenue per average mile worked and the revenue per train-mile run during the last five years were as follows:—

**GOVERNMENT RAILWAYS : GROSS REVENUE.**

Year.	N.S.W.(a)	Vic.(b)	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Australia.
TOTAL GROSS REVENUE.								
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1937-38 ..	20,286	9,735	7,383	3,285	3,678	464	443	45,274
1938-39 ..	19,946	9,284	7,798	3,119	3,599	487	547	44,780
1939-40 ..	20,755	9,861	8,090	3,168	3,556	536	622	46,588
1940-41 ..	24,016	11,239	8,415	3,512	3,572	600	971	52,325
1941-42 ..	28,487	14,520	11,654	4,944	3,996	686	2,195	66,482

(a) Includes £800,000 per annum contribution from consolidated revenue towards losses on working of country development lines. (b) Includes the following recoups by the Treasury—in 1937-38 and 1938-39, £10,000 guarantees in respect of losses on certain lines; and in 1939-40, 1940-41 and 1941-42, £42,000, £39,000 and £36,000 respectively, recoups of losses resulting from reduction in suburban fares.



GOVERNMENT RAILWAYS: GROSS REVENUE—*continued*.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Australia.
GROSS REVENUE PER AVERAGE MILE WORKED.								
	£	£	£	£	£	£	£	£
1937-38 ..	3,318	2,062	1,124	1,285	841	714	202	1,666
1938-39 ..	3,263	1,953	1,188	1,220	822	740	248	1,645
1939-40 ..	3,392	2,072	1,232	1,239	812	832	283	1,711
1940-41 ..	3,920	2,362	1,281	1,373	815	935	441	1,921
1941-42 ..	4,650	3,060	1,775	1,933	912	1,009	997	2,442

GROSS REVENUE PER TRAIN-MILE RUN.								
	d.	d.	d.	d.	d.	d.	d.	d.
1937-38 ..	161.20	130.40	129.83	129.00	138.52	57.70	140.19	141.22
1938-39 ..	159.01	124.54	134.38	121.19	131.38	61.30	145.42	138.70
1939-40 ..	169.02	139.16	136.83	128.24	139.13	62.33	155.84	147.60
1940-41 ..	178.53	151.82	138.30	143.07	139.53	66.45	188.86	156.80
1941-42 ..	187.99	190.96	170.59	179.81	150.92	75.66	226.91	180.36

(ii) *Coaching, Goods and Miscellaneous Receipts.* (a) *Totals.* The gross revenue is composed of (a) receipts from coaching traffic, including the carriage of mails, horses, parcels, etc., by passenger trains; (b) receipts from the carriage of goods and live stock; and (c) rents and miscellaneous items. The following table shows the gross revenue from 1937-38 to 1941-42, classified according to the three chief sources of receipts. The total of the three items specified has already been given in the preceding paragraph.

## GOVERNMENT RAILWAYS: COACHING, GOODS AND MISCELLANEOUS RECEIPTS.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Australia.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.

COACHING TRAFFIC RECEIPTS.								
1937-38 ..	6,844	4,119	1,995	728	717	138	167	14,708
1938-39 ..	6,877	4,286	2,057	754	704	152	191	15,024
1939-40 ..	7,175	4,450	2,098	784	725	156	229	15,617
1940-41 ..	8,499	5,436	2,235	976	826	188	356	18,516
1941-42 ..	10,639	6,820	3,025	1,492	1,112	223	669	23,980

GOODS AND LIVE STOCK TRAFFIC RECEIPTS.								
1937-38 ..	10,831	4,945	5,121	2,353	2,769	311	190	26,520
1938-39 ..	10,356	4,276	5,474	2,144	2,807	318	224	25,599
1939-40 ..	10,851	4,637	5,716	2,167	2,745	362	247	26,725
1940-41 ..	12,415	4,860	5,808	2,261	2,651	392	421	28,808
1941-42 ..	14,387	6,573	8,239	3,057	2,736	438	1,342	36,772

MISCELLANEOUS RECEIPTS.								
	(a)	(b)						
1937-38 ..	2,611	671	267	203	192	16	86	4,046
1938-39 ..	2,713	722	266	222	(c) 88	17	129	4,157
1939-40 ..	2,729	775	276	217	86	18	145	4,246
1940-41 ..	3,101	944	372	276	94	20	194	5,001
1941-42 ..	3,461	1,126	390	395	148	26	184	5,730

(a) See note (a) to Gross Revenue table above. (b) See note (b) to Gross Revenue table above.  
(c) Several items previously included in "Miscellaneous" now included in "Coaching" and "Goods."

(b) *Percentages.* The following table shows for each of the past two years the percentage which each class of receipts bears to the total gross revenue :—

**GOVERNMENT RAILWAYS : PERCENTAGES OF RECEIPTS.**

System.	1940-41.			1941-42.		
	Coaching.	Goods and Live Stock.	Miscellaneous.	Coaching.	Goods and Live Stock.	Miscellaneous.
	%	%	%	%	%	%
New South Wales ..	35.39	51.70	12.91	37.35	50.50	12.15
Victoria ..	48.37	43.24	8.39	46.97	45.27	7.76
Queensland ..	26.56	69.02	4.42	25.96	70.70	3.34
South Australia ..	27.78	64.37	7.85	30.18	61.84	7.98
Western Australia ..	23.12	74.23	2.65	27.83	68.47	3.70
Tasmania ..	31.23	65.40	3.37	32.48	63.75	3.77
Commonwealth ..	36.69	43.36	19.95	30.49	61.13	8.38
Australia ..	35.38	55.06	9.56	36.07	55.31	8.62

4. *Working Expenses.*—(i) *General.* In order to make an adequate comparison of the working expenses, allowance should be made for the variation of gauges and of physical and traffic conditions, not only on the different systems of the State and Commonwealth railways, but also on different portions of the same systems. When traffic is light, the percentage of working expenses is naturally greater than when traffic is heavy ; and this is especially true in Australia, where ton-mile rates are in many cases based on a tapering principle—i.e., a lower rate per ton-mile is charged upon merchandise from remote interior districts—and where on many of the lines there is but little back loading.

During the last two years large amounts, totalling about £2,250,000 in 1940-41 and £5,100,000 in 1941-42, have been set aside by the Railways as reserves, mainly to provide for depreciation and accrued leave, to be expended as circumstances permit. War conditions have subjected the Railways to heavy demands, and shortages in manpower and materials have rendered it impossible to deal with the resulting rapid deterioration of stock, tracks and works. Leave has accrued because shortages in staff have prevented the taking of annual leave. The Railway authorities have therefore taken the opportunity, which increased revenues offered, to provide for these future commitments. Particulars of the amounts thus set aside are included in the Maintenance of Way and Works and Rolling Stock sections following.

The following table shows the total annual expenditure, the percentage thereof on gross revenue, and the expenditure per average mile worked and per train-mile run for the years 1937-38 to 1941-42 :—

**GOVERNMENT RAILWAYS : WORKING EXPENSES.**

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	C'wealth.	Australia.
<b>TOTAL WORKING EXPENSES.</b>								
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1937-38 ..	13,760	7,830	5,887	2,867	2,710	676	512	34,242
1938-39 ..	14,543	8,060	6,193	2,931	2,911	678	642	35,958
1939-40 ..	14,647	8,058	6,368	2,937	2,828	688	842	36,368
1940-41 ..	17,162	8,959	6,708	3,062	2,758	757	903	40,309
1941-42 ..	21,712	11,600	8,488	3,856	3,026	854	1,507	51,043
<b>PERCENTAGE ON GROSS REVENUE.</b>								
	%	%	%	%	%	%	%	%
1937-38 ..	67.83	80.43	79.74	87.28	73.68	145.60	115.48	75.63
1938-39 ..	72.91	86.82	79.42	93.97	80.90	139.18	117.43	80.30
1939-40 ..	70.57	81.72	78.72	92.72	79.54	128.22	135.35	78.06
1940-41 ..	71.46	79.71	79.72	87.18	77.21	126.19	93.00	77.04
1941-42 ..	76.22	79.89	72.83	78.00	75.72	124.51	68.64	76.78

GOVERNMENT RAILWAYS: WORKING EXPENSES—*continued*.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	C'wealth.	Australia.
PER AVERAGE MILE WORKED.								
	£	£	£	£	£	£	£	£
1937-38 ..	2,251	1,659	897	1,122	620	1,039	233	1,260
1938-39 ..	2,378	1,695	943	1,146	665	1,030	292	1,321
1939-40 ..	2,394	1,693	970	1,148	646	1,067	382	1,336
1940-41 ..	2,801	1,883	1,022	1,197	629	1,180	410	1,480
1941-42 ..	3,544	2,444	1,293	1,508	691	1,331	685	1,875

## PER TRAIN-MILE RUN.

	d.	d.	d.	d.	d.	d.	d.	d.
1937-38 ..	109.34	104.89	103.53	112.60	102.06	84.01	161.90	106.81
1938-39 ..	115.93	108.13	106.72	113.88	106.28	85.31	170.77	111.38
1939-40 ..	119.28	113.71	107.71	118.90	110.66	79.92	210.93	115.22
1940-41 ..	127.58	121.02	110.26	124.72	107.74	83.86	175.65	120.79
1941-42 ..	143.29	152.55	124.25	140.24	114.27	94.20	155.74	138.48

(ii) *Distribution.* The following table shows the distribution of working expenses under four chief heads of expenditure for the years 1937-38 to 1941-42 :

## GOVERNMENT RAILWAYS: DISTRIBUTION OF WORKING EXPENSES.

Year.	N.S.W.	Victoria. (a)	Q'land.	S. Aust.	W. Aust.	Tasmania. (b)	C'wealth.	Australia
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.

## MAINTENANCE OF WAY AND WORKS.(c)

1937-38 ..	2,614	1,406	1,537	528	644	135	179	7,643
1938-39 ..	2,972	1,374	1,602	503	667	129	245	7,492
1939-40 ..	2,835	1,342	1,610	501	635	120	387	7,430
1940-41 ..	4,118	1,513	1,765	516	604	126	333	8,975
1941-42 ..	4,482	1,961	2,378	549	575	133	552	10,630

## ROLLING STOCK.(c)

1937-38 ..	5,562	2,813	2,543	1,340	1,214	375	208	14,055
1938-39 ..	5,622	2,801	2,695	1,389	1,321	373	251	14,452
1939-40 ..	5,744	2,824	2,799	1,382	1,306	389	275	14,719
1940-41 ..	6,366	3,328	2,908	1,448	1,266	434	336	16,086
1941-42 ..	8,605	4,668	3,674	1,853	1,376	486	607	21,359

## TRANSPORTATION AND TRAFFIC.

1937-38 ..	3,324	2,121	1,460	648	715	143	83	8,494
1938-39 ..	3,502	2,254	1,533	682	779	151	101	9,002
1939-40 ..	3,484	2,222	1,580	690	736	149	129	8,990
1940-41 ..	3,706	2,310	1,640	722	745	161	171	9,455
1941-42 ..	4,414	2,556	1,851	895	794	178	280	10,968



**GOVERNMENT RAILWAYS: DISTRIBUTION OF WORKING EXPENSES**  
—continued.

Year.	N.S.W.	Victoria. (a)	Q'land.	S. Aust.	W. Aust.	Tasmania. (b)	C'wealth.	Australia.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.

**OTHER CHARGES.**

1937-38 ..	2,259	1,490	348	351	137	23	42	4,650
1938-39 ..	2,448	1,630	363	357	144	24	45	5,011
1939-40 ..	2,584	1,670	379	365	150	29	52	5,229
1940-41 ..	2,972	1,807	396	376	143	36	63	5,793
1941-42 ..	4,122	2,414	584	559	282	57	68	8,086

(a) Certain amounts charged to special funds, previously deducted from Other Charges, have now been deducted from Maintenance of Way and Works and Rolling Stock. (b) Depreciation charges, previously included in Other Charges, are now included under Rolling Stock. (c) See par. 4 (i).

5. Net Revenue.—The following table shows the net earnings, i.e., the excess of gross earnings over working expenses, and the amount of such net earnings per average mile worked and per train-mile run for the last five years :

**GOVERNMENT RAILWAYS: NET REVENUE.**

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	C'wealth.	Australia.
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**NET REVENUE.**

	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1937-38 ..	6,526	1,905	1,496	418	968	— 212	— 69	11,032
1938-39 ..	5,403	1,224	1,605	188	688	— 191	— 95	8,822
1939-40 ..	6,108	1,803	1,722	231	728	— 152	— 220	10,220
1940-41 ..	6,854	2,280	1,707	450	814	— 157	68	12,016
1941-42 ..	6,774	2,920	3,166	1,088	970	— 168	689	15,439

**NET REVENUE PER AVERAGE MILE WORKED.**

	£	£	£	£	£	£	£	£
1937-38 ..	1,067	403	228	163	221	— 325	— 31	406
1938-39 ..	884	257	244	74	157	— 290	— 43	324
1939-40 ..	998	379	262	90	166	— 235	— 100	375
1940-41 ..	1,119	479	260	176	186	— 245	31	447
1941-42 ..	1,106	615	482	425	221	— 262	313	567

**NET REVENUE PER TRAIN-MILE RUN.**

	d.	d.	d.	d.	d.	d.	d.	d.
1937-38 ..	51.86	25.52	26.30	16.40	36.46	—26.31	—21.71	34.41
1938-39 ..	43.08	16.42	27.66	7.31	25.10	—24.01	—25.35	27.33
1939-40 ..	49.74	25.44	29.12	9.34	28.47	—17.59	—55.09	32.38
1940-41 ..	50.95	30.81	28.05	18.35	31.80	—17.40	13.21	36.01
1941-42 ..	44.70	38.41	46.34	39.57	36.65	—18.54	71.17	41.88

In the graphs accompanying this Chapter the gross and net revenue and working expenses are shown from 1870 to 1942.

6. Interest.—The interest payments on expenditure from loans for the construction and equipment of the Government railways in Australia during the five years ended 30th June, 1942, were as follows :—

**GOVERNMENT RAILWAYS : INTEREST PAYMENTS ON RAILWAY LOAN EXPENDITURE.**

Year.	N.S.W. (a)	Victoria. (b)	Q'land. (a) (b)	S. Aust. (b)	W. Aust.	Tasmania. (b)	C'wealth.	Australia. (a)
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1937-38 ..	5,340	1,841	1,633	1,071	988	80	377	11,457
1938-39 ..	5,360	1,860	1,642	1,075	1,001	80	395	11,540
1939-40 ..	5,350	1,880	1,659	1,092	1,028	84	387	11,607
1940-41 ..	5,389	1,921	1,666	1,085	1,030	85	381	11,684
1941-42 ..	5,389	1,948	1,554	1,075	1,033	86	380	11,592

(a) Includes interest charges on the Grafton-South Brisbane Line, which for 1941-42 amounted to £225,939 and was contributed by New South Wales, £72,179; Queensland, £27,029; and the Commonwealth, £126,731. See par. 4, p. 109. (b) Capital indebtedness reduced by legislation in these four States. See par. 1, p. 112.

The interest payable on the cost of construction and equipment, after the expenditure from Consolidated Revenue (£9,580,911) for that purpose had been deducted, was at the rate of 3.69 per cent. in 1941-42.

Exchange on interest payments abroad and certain other charges are not included in the table above. These items are not charged against the railways in Queensland and Western Australia and have been excluded for the purposes of comparison. In the remaining States the amounts paid on account of exchange in 1941-42 were :—New South Wales, £738,505; Victoria, £209,487; South Australia, £124,495; and Tasmania, £10,168.

7. Profit or Loss.—The following table shows, for the last five years, the actual profit or loss after deducting working expenses, and interest, but excluding exchange, from the gross revenue :—

**GOVERNMENT RAILWAYS : PROFIT OR LOSS.**

**PROFIT OR LOSS AFTER PAYMENT OF WORKING EXPENSES AND INTEREST.**

Year.	N.S.W. (a)	Victoria.	Q'land. (a)	S. Aust.	W. Aust.	Tasmania.	C'wealth.	Australia. (a)
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1937-38 ..	1,186	64	— 138	— 653	— 20	— 292	— 445	— 425
1938-39 ..	43	— 636	— 37	— 886	— 313	— 274	— 490	— 2,720
1939-40 ..	758	— 77	63	— 862	— 300	— 235	— 607	— 1,387
1940-41 ..	1,464	360	40	— 634	— 216	— 243	— 313	331
1941-42 ..	1,384	972	1,612	13	— 63	— 254	309	3,846

(a) See note (a), par. 6, above.

8. Traffic.—(i) *General.* Reference has already been made to the difference in the traffic conditions on many of the lines. These conditions differ not only in the several State and Commonwealth systems, but also on different lines in the same system, and apply to both passenger and goods traffic. By far the greater part of the population of Australia is confined to a fringe of country near the coast, more especially in the eastern

and southern districts. A large proportion of the railway traffic between the chief centres of population is therefore carried over lines in the neighbourhood of the coast, and is thus, in some cases, open to seaborne competition. In more recent years competition from air transport has become an important factor.

The following table gives particulars for the years 1937-38 to 1941-42 :—

### GOVERNMENT RAILWAYS : TRAFFIC.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	C'wealth.	Australia.
NUMBER OF PASSENGER-JOURNEYS.								
	'000.	'000.	'000.	'000.	'000.	'000.	'000.	'000.
1937-38 ..	189,349	137,895	25,688	17,632	12,011	2,267	100	384,942
1938-39 ..	186,720	142,123	24,639	17,529	11,416	2,297	117	384,841
1939-40 ..	179,066	144,649	24,638	17,642	10,793	2,412	130	379,330
1940-41 ..	194,146	159,218	26,194	20,360	11,518	2,792	194	414,422
1941-42 ..	218,846	180,982	29,099	28,513	14,532	3,146	332	475,450

### PER AVERAGE MILE OF LINE WORKED.

	No.	No.	No.	No.	No.	No.	No.	No.
1937-38 ..	30,970	29,209	3,912	6,901	2,746	3,482	45	14,163
1938-39 ..	30,541	29,896	3,752	6,854	2,608	3,490	53	14,134
1939-40 ..	29,269	30,395	3,752	6,899	2,464	3,746	59	13,928
1940-41 ..	31,687	33,457	3,989	7,961	2,629	4,349	88	15,217
1941-42 ..	35,720	38,137	4,431	11,149	3,317	4,900	151	17,466

### TONNAGE OF GOODS AND LIVE STOCK CARRIED.

	'000.	'000.	'000.	'000.	'000.	'000.	'000.	'000.
1937-38 ..	16,480	7,258	5,061	2,879	3,062	857	132	35,729
1938-39 ..	15,417	5,976	5,234	2,640	2,859	844	186	33,156
1939-40 ..	14,620	6,187	5,472	2,675	2,659	879	199	32,691
1940-41 ..	18,032	6,623	5,600	2,742	2,604	955	211	36,767
1941-42 ..	18,588	7,503	5,761	3,100	2,638	1,024	326	38,940

### PER AVERAGE MILE OF LINE WORKED.

	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1937-38 ..	2,696	1,537	771	1,127	700	1,316	60	1,315
1938-39 ..	2,522	1,257	797	1,032	653	1,282	84	1,218
1939-40 ..	2,390	1,300	833	1,046	607	1,365	90	1,193
1940-41 ..	2,943	1,392	853	1,072	594	1,488	96	1,350
1941-42 ..	3,034	1,581	877	1,212	602	1,594	148	1,431

(ii) *Metropolitan and Country Passenger Traffic and Revenue 1940-41.* A further indication of the difference in passenger traffic conditions is obtained from the comparison of the volume of metropolitan and suburban and country traffic shown below. Figures for the year 1941-42 are not available for all States, because of the reductions in statistical work made necessary by staff shortages and the extra work involved in war traffic. Figures for 1940-41, the latest year for which complete information is available, have therefore been used.



**GOVERNMENT RAILWAYS : METROPOLITAN AND SUBURBAN, AND COUNTRY  
PASSENGER TRAFFIC AND RECEIPTS, 1940-41.**

System.	Passenger-Journeys.			Revenue.		
	Metropolitan and Suburban.	Country.	Total.	Metropolitan and Suburban.	Country.	Total.
	No.	No.	No.	£	£	£
N.S.W. ..	180,441,178	13,704,560	194,145,738	3,403,264	4,232,764	7,636,028
Victoria ..	149,651,756	9,566,656	159,218,412	2,622,816	2,381,080	5,003,896
Queensland	21,054,711	5,138,847	26,193,558	365,118	1,424,360	1,789,478
S. Australia	18,641,965	1,718,046	20,360,011	268,893	552,162	821,055
W. Australia	9,967,342	1,550,874	11,518,216	129,469	511,491	640,960
Tasmania ..	(a) 1,789,638	1,002,452	2,792,090	(a) 23,921	141,921	165,842
Common- wealth ..	..	193,987	193,987	..	295,938	295,938
Australia	381,546,590	32,875,422	414,422,012	6,813,481	9,539,716	16,353,197

(a) Estimated.

(iii) *Goods Traffic.* (a) *Classification.* Some indication of the differing conditions of the traffic in each system is also given by an examination of the tonnage of the various classes of commodities carried, and of the revenue derived therefrom. The following table shows the number of tons of various representative commodities carried during 1940-41. For the reason given above, figures for 1941-42 are not available for all States.

**GOVERNMENT RAILWAYS : CLASSIFICATION OF COMMODITIES CARRIED, 1940-41.**

**'000 TONS CARRIED.**

System.	Coal, Coke and Shale.	Other Minerals.	Grain and Flour.	Wool.	Live Stock.	All other Com- modities.	Total.
New South Wales ..	(a) 9,340	1,607	2,145	200	766	3,974	18,032
Victoria ..	296	167	1,192	110	741	4,117	6,623
Queensland ..	894	483	322	88	566	3,247	5,600
South Australia ..	155	536	669	39	186	1,157	2,742
Western Australia ..	257	192	850	29	119	1,157	2,604
Tasmania ..	(b) 69	309	(c)	6	29	542	955
Commonwealth ..	8	24	(c)	5	51	123	211
Australia ..	11,019	3,318	5,178	477	2,458	14,317	36,767

(a) Includes 196,226 tons of coal on which way leave charges only were collected.

(b) Native coal.

(c) Included with "All Other Commodities."

(b) *Revenue.* The following table shows the revenue derived from goods and live stock traffic during 1940-41 :—

**GOVERNMENT RAILWAYS : REVENUE FROM GOODS AND LIVE STOCK, 1940-41.**

Class.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Australia.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
General mer- chandise	7,620	3,805	3,736	1,444	2,123	279	323	19,330
Wool ..	804	224	474	91	76	7	12	1,688
Live-stock ..	1,290	619	823	210	143	25	67	3,177
Minerals—								
Coal and coke ..	2,048	94	432	34	152	(a)	2	2,762
Other ..	473	52	326	431	73	81	13	1,449
Miscellaneous	180	66	17	51	84	..	4	402
Total ..	12,415	4,860	5,808	2,261	2,651	392	421	28,808

(a) Included with "Other."

(iv) *Passenger-Mileage.* The following table gives particulars of passenger-mileage in respect of the Government railways in Australia for the years 1939-40 to 1941-42.

GOVERNMENT RAILWAYS : SUMMARY OF "PASSENGER-MILES."

Year ended 30th June—	Passenger Train-Mileage.	Total Passenger-Miles.	Average Passengers per Train-Mile.	Average Mileage per Passenger-Journey.	Passenger Earnings.				Density of Traffic per Average Mile Worked.
					Gross.	Per Average Mile Worked.	Per Passenger-Mile.	Per Passenger-Train-Mile.	
	'000.	'000.	No.	Miles.	£'000.	£	d.	d.	No.
NEW SOUTH WALES.									
1940	18,388	2,199,564	120	12.28	6,347	1,038	0.69	82.84	359,523
1941	19,890	2,716,377	137	13.99	7,636	1,246	0.67	92.14	443,345
1942	(b)	(b)	(b)	(b)	69,560	1,560	(b)	(b)	(b)
VICTORIA.									
1940	11,843	1,367,596	115	9.45	4,032	847	0.71	81.71	287,375
1941	12,558	1,685,814	134	10.59	5,004	1,051	0.71	95.63	354,245
1942	12,547	(b)	(b)	(b)	6,299	1,327	(b)	120.48	(b)
QUEENSLAND.(a)									
1940	5,916	(b)	(b)	(b)	1,574	240	(b)	63.84	(b)
1941	5,939	(b)	(b)	(b)	1,711	263	(b)	69.15	(b)
1942	6,323	(b)	(b)	(b)	2,416	372	(b)	91.72	(b)
SOUTH AUSTRALIA.									
1940	3,615	220,037	61	12.47	630	246	0.69	41.81	86,040
1941	3,519	277,570	79	13.63	821	321	0.71	56.00	108,532
1942	3,854	434,465	113	15.24	1,309	512	0.72	81.53	169,879
WESTERN AUSTRALIA.									
1940	2,678	(b)	(b)	(b)	540	123	(b)	48.42	(b)
1941	2,762	(b)	(b)	(b)	641	146	(b)	55.70	(b)
1942	2,932	(b)	(b)	(b)	924	211	(b)	75.61	(b)
TASMANIA.									
1940	1,161	37,269	32	15.45	133	207	0.86	26.72	57,871
1941	1,193	(b)	(b)	(b)	166	258	(b)	33.36	(b)
1942	1,121	(b)	(b)	(b)	200	311	(b)	42.78	(b)
COMMONWEALTH.(d)									
1940	423	41,245	98	318.04	180	82	1.05	102.37	18,739
1941	494	67,985	138	350.46	296	134	1.04	143.92	30,887
1942	459	126,190	275	379.74	584	265	1.11	305.46	57,332

(a) Excludes Queensland portion of Grafton-South Brisbane (Uniform Gauge) Line. (b) Not available. (c) Estimated. (d) Railways controlled by Commonwealth Government.

(v) *Ton-Mileage.* Particulars regarding total “ton-miles” are given in the following table for each of the years 1939-40 to 1941-42 :—

## GOVERNMENT RAILWAYS : SUMMARY OF “TON-MILES.”

Year ended 30th June—	Goods-Train-Mileage.	Total “Ton-miles.”	Average Freight Paying Load per Train-Mile.	Average Haul per Ton.	Goods and Live Stock Earnings.				Density of Traffic per Average Mile worked.
					Gross.	Per Average Mile Worked.	Per “Ton-Mile.”	Per Goods-Train-Mile.	
	'000.	'000.	Tons.	Miles.	£'000.	£	d.	d.	Tons.
NEW SOUTH WALES.									
1940	11,082	1,827,662	165	126.11	10,851	1,774	1.42	225.98	298,735
1941	12,395	2,115,786	171	118.03	12,415	2,026	1.39	240.39	345,885
1942	(g)	(g)	(g)	(g)	14,386	2,348	(g)	(g)	(g)
VICTORIA.									
1940	5,165	818,637	159	132.32	4,637	974	1.36	218.48	172,021
1941	5,209	811,890	156	122.59	4,860	1,021	1.44	223.92	170,601
1942	5,702	(g)	(g)	(g)	6,573	1,385	(g)	276.68	(g)
QUEENSLAND.(a)									
1940	8,175	(b) 766,635	(c) 94	(b) 144.72	5,646	860	(b) 1.76	165.76	(b) 121,625
1941	8,527	811,404	95	150.76	5,695	876	1.67	160.29	128,737
1942	9,920	(g)	(g)	(g)	8,003	1,232	(g)	193.64	(g)
SOUTH AUSTRALIA.									
1940	2,313	336,885	146	125.93	2,167	847	1.54	220.48	131,730
1941	2,373	330,836	139	120.65	2,261	884	1.64	228.62	129,359
1942	2,745	385,754	141	124.43	3,057	1,195	1.90	267.32	150,832
WESTERN AUSTRALIA.									
1940	(d) 3,456	361,690	105	136.03	2,745	626	1.82	190.61	82,570
1941	(d) 3,382	351,245	104	134.89	2,651	605	1.75	188.16	80,169
1942	(d) 3,424	341,729	100	129.51	2,736	625	1.86	191.81	77,994
TASMANIA.(e)									
1940	(d) 904	42,265	47	49.83	336	522	1.91	89.20	65,630
1941	(d) 974	48,784	50	52.68	367	572	1.81	90.41	75,988
1942	(d) 1,055	54,030	51	54.51	409	637	1.82	92.97	84,159
COMMONWEALTH.(f)									
1940	535	37,904	71	190.39	248	112	1.57	111.18	17,221
1941	740	48,982	66	232.06	421	191	2.06	136.50	22,254
1942	1,863	117,604	63	360.49	1,342	610	2.74	172.86	53,431

(a) Excludes Queensland portion of Grafton-South Brisbane (Uniform Gauge) Line. (b) Excludes Cooktown and Normanton Railways and Innisfail and Mourilyan Tramways. (c) Approximate. (d) Estimated. (e) Excludes particulars of live stock carried. (f) Railways controlled by the Commonwealth Government. (g) Not available.



9. **Rolling Stock.**—The following table shows the number of rolling stock in use at 30th June for each of the years 1940 to 1942. Further details may be found in *Transport and Communication Bulletins*.

### GOVERNMENT RAILWAYS : ROLLING STOCK.

System.	1939-40.			1940-41.			1941-42.		
	Locos.	Coaching Stock.	Other Stock.	Locos.	Coaching Stock.	Other Stock.	Locos.	Coaching Stock.	Other Stock.
New South Wales ..	1,254	2,836	24,165	1,224	2,850	24,079	1,149	2,859	24,565
Victoria ..	582	2,420	20,802	593	2,423	20,576	583	2,418	20,760
Queensland ..	758	1,438	18,840	769	1,450	18,983	737	1,449	19,092
South Australia ..	330	593	7,866	330	606	7,936	325	643	7,977
Western Australia ..	421	445	11,249	411	445	11,212	388	449	10,984
Tasmania ..	95	234	2,161	95	230	2,162	95	231	2,220
Commonwealth ..	113	90	1,378	118	98	1,430	125	106	1,480
Australia ..	3,553	8,056	86,461	3,540	8,102	86,378	3,402	8,155	87,078

10. **Accidents.**—The following table gives particulars of the number of persons killed and injured through train accidents and the movement of rolling stock on the Government railways of Australia for each of the years 1938-39, 1939-40, and 1940-41 :—

### GOVERNMENT RAILWAYS : ACCIDENTS.

System.	1938-39.		1939-40.		1940-41.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
New South Wales ..	57	625	56	501	64	525
Victoria ..	48	466	36	373	48	517
Queensland ..	23	132	25	162	24	118
South Australia ..	9	187	16	159	11	202
Western Australia ..	14	142	17	148	14	142
Tasmania ..	7	62	8	50	5	39
Commonwealth ..	1	20	2	42	1	33
Australia ..	159	1,634	160	1,435	167	1,576

Particulars for the year 1941-42 are not available.

11. **Consumption of Oil and Fuel.**—The following table shows the quantities and values of oil and fuel consumed by the various Government Railway Departments during 1941-42 :—

### GOVERNMENT RAILWAYS : CONSUMPTION AND VALUE OF OIL AND FUEL, 1941-42.

System.	Oil.				Coal.			
	Lubrication.		Fuel, Light, etc.		Locomotives.		Other Purposes.	
	Gallons. '000.	£'000.	Gallons. '000.	£'000.	Tons. '000.	£'000.	Tons. '000.	£'000.
N.S.W. ..	643	113	1,479	76	1,274	1,116	651	707
Victoria ..	196	30	1,366	74	415	683	166	219
Q'land ..	297	48	475	36	545	596	11	18
S. Aust. ..	106	17	1,019	68	260	475	5	9
W. Aust. ..	81	12	412	21	337	301	9	8
Tas. ..	49	8	260	14	59	83	2	5
C'wealth ..	53	7	201	12	77	159	1	1
Australia	1,425	235	5,212	301	2,967	3,413	845	967

12. Staff Employed.—The following table gives details of the average staff employed by the Government railways of Australia during 1941-42 :—

GOVERNMENT RAILWAYS : AVERAGE STAFF EMPLOYED(a), 1941-42.

System.	Operating Staff.		Construction Staff.		All Employees—Staff.	
	Salaried.	Wages.	Salaried.	Wages.	Salaried.	Wages.
	No.	No.	No.	No.	No.	No.
New South Wales ..	7,348	37,943	6	1,411	7,354	39,354
Victoria ..	3,358	22,051	(b)	(b)	3,358	22,051
Queensland ..	3,296	16,800	6	98	3,302	16,898
South Australia ..	1,609	9,421	(c)	(c)	1,609	9,421
Western Australia ..	1,239	6,909	..	..	1,239	6,909
Tasmania ..	209	2,023	(d)	(d)	209	2,023
Commonwealth ..	206	2,199	..	41	206	2,240
Australia ..	17,265	97,346	12	1,550	17,277	98,896

(a) Excludes members of staff serving with Defence Services. (b) In Victoria, railway construction work is not under the control of the Railways Commissioners. (c) Staff engaged on special work. (d) Construction work has been placed under the direction of the Chief Engineer of the Way and Works Section.

### § 3. Private Railways.

1. Total Mileage Open, 1941-42.—The bulk of the private railways in Australia has been laid down for the purpose of hauling timber, firewood, sugar-cane, coal and other minerals, and it is not generally used for the conveyance of passengers or for public goods traffic. In many cases the lines are practically unballasted and easily removable.

The railways referred to in this section include only lines open to the public for general passenger and goods traffic. Complete particulars of lines used for special purposes only are not available.

2. Lines Open for General Traffic.—The following statement gives a summary of the operations of private railways open for general traffic for 1941-42 :—

PRIVATE RAILWAYS : SUMMARY OF OPERATIONS, 1941-42.

State.	Route-Miles Open.	Capital Cost.	Gross Revenue.	Working Expenses.	Train-Miles Run.	Passenger-Journeys.	Goods, etc., Carried.	Em- ployees
	Miles.	£'000.	£	£	'000.	'000.	'000. Tons.	No.
N.S.W.(a)	68.09	1,228	359,306	213,882	403	984	670	392
Vic. ..	24.94	82	8,113	10,002	12	7	32	21
Q'land(a)	183.39	233	27,495	24,775	90	4	221	61
S.A.(a) ..	50.90	(b)	(b)	(b)	102	(b)	2,439	60
W.A. ..	277.00	2,258	254,759	106,834	337	76	161	289
Tas.(a) ..	116.34	924	150,153	129,665	187	28	205	335
Australia(a)	720.66	4,725	799,826	485,158	1,131	1,099	3,728	1,158

(a) Incomplete.

(b) Not available.

Some of the particulars given in the table are incomplete in respect of New South Wales, Queensland, South Australia and Tasmania. In New South Wales and Queensland several lines, although owned by private companies, are operated by the Government Railway Departments, and Government rolling stock is used thereon, while some of the companies are not able to supply particulars of the capital cost, revenue and working

expenses of the lines which they operate. In some cases the figures relating to tonnage of goods, etc., include particulars of coal, ores, timber, sugar-cane, etc., carried for private purposes, as details relating to goods carried for the general public are not recorded separately.

### C. TRAMWAYS.

1. *Systems in Operation.*—(i) *General.* Tramway systems are in operation in all the Capital cities and in a number of the larger towns of Australia. The systems are operated mainly by governmental and municipal authorities, and are now all electric, with the exception of Government lines at Western Australian north-western ports (9 miles at the end of 1941).

In many parts of Australia private lines used for special purposes in connexion with the timber, mining, sugar, or other industries are often called tramways, but they are more properly railways (see above), and the traffic on them has nothing in common with that of the street tramways for the conveyance of passengers, which are dealt with in the present section.

As non-electric tramways have practically ceased to exist, combined particulars of the mileages, cost of construction and operations of electric and non-electric tramways have been discontinued after 1940-41.

(ii) *Total Mileage Open and Classification of Lines.* The following tables show for each State the total mileage of tramway lines open for general passenger traffic for 1940-41, classified (a) according to the controlling authority; (b) according to the motive-power used; and (c) according to gauge:—

#### TRAMWAYS : ROUTE MILEAGE OPEN, 1940-41.

Particulars—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia
ACCORDING TO CONTROLLING AUTHORITY.							
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Government ..	162.20	175.50	..	..	58.57	..	396.27
Municipal ..	..	..	61.59	77.47	11.90	29.44	180.40
Private ..	3.50	..	..	..	9.40	..	12.90
Total ..	165.70	175.50	61.59	77.47	79.87	29.44	589.57
ACCORDING TO MOTIVE-POWER.							
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Electric ..	162.20	167.60	61.59	77.47	70.81	29.44	569.11
Steam or Petrol ..	3.50	..	..	..	9.06	..	12.56
Cable ..	..	7.90	..	..	..	..	7.90
Total ..	165.70	175.50	61.59	77.47	79.87	29.44	589.57
ACCORDING TO GAUGE.							
Gauge—							
5 ft. 3 in. ..	..	5.18	..	..	..	..	5.18
4 ft. 8½ in. ..	165.70	170.32	61.59	77.47	..	..	475.08
3 ft. 6 in. ..	..	..	..	..	79.87	29.44	109.31
Total ...	165.70	175.50	61.59	77.47	79.87	29.44	589.57



(iii) *Cost of Construction and Equipment.* The table hereunder shows the total cost of construction and equipment of all tramways to 30th June, 1941, classified according to the nature of the motive-power.

### TRAMWAYS : COST OF CONSTRUCTION AND EQUIPMENT, 1940-41.

Nature of Motive-power.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
Electric ..	£ 8,759,923	£ 8,193,974	£ 2,390,928	£ 4,433,204	£ 1,766,313	£ 663,239	£ 26,207,581
Steam or Petrol ..	(a) 20,000	..	..	..	87,075	..	107,075
Cable ..	..	391,765	..	..	..	..	391,765
Total ..	8,779,923	8,585,739	2,390,928	4,433,204	1,853,388	663,239	26,706,421

(a) Estimated.

(iv) *Summary of Operations, 1936-37 to 1940-41.* The following table gives a summary of the working of all tramway systems in Australia for the years 1936-37 to 1940-41 :—

### TRAMWAYS : SUMMARY OF OPERATIONS.

Particulars.	1936-37.	1937-38.	1938-39.	1939-40.	1940-41.
Mileage open for traffic .. miles	613.02	607.66	606.49	587.92	589.57
Cost of construction and equipment .. £'000	26,949	26,959	26,888	26,923	26,708
Cost per mile .. .. £	43,961	44,366	44,334	45,794	45,302
Gross revenue .. .. £'000	7,735	7,835	7,866	7,865	8,216
Working expenses .. .. "	5,609	5,975	6,264	6,213	6,208
Net earnings .. .. "	2,126	1,860	1,602	1,652	2,008
Interest .. .. "	1,102	1,117	1,094	1,101	1,122
Percentage of working expenses on gross revenue .. .. %	72.51	76.26	79.63	78.99	75.56
Percentage of net earnings on capital cost .. .. %	7.89	6.90	5.96	6.14	7.52
Tram-miles run .. .. '000 miles	82,295	83,806	83,838	80,343	79,058
Gross revenue per tram-mile .. d.	22.56	22.44	22.52	23.49	24.94
Working expenses per tram-mile .. "	16.36	17.11	17.93	18.56	18.84
Net earnings per tram-mile .. "	6.20	5.33	4.59	4.93	6.10
Passenger-journeys .. .. '000	701,941	754,957	716,351	712,772	747,312
" .. per tram-mile No.	8.53	8.49	8.54	8.87	9.45
Average revenue per passenger-journey .. d.	2.64	2.64	2.64	2.65	2.64
Persons employed at end of year No.	17,864	18,073	17,695	17,450	17,838

2. *Electric Tramways.*—(i) *Financial Operations.* The following table gives the capital cost and the financial result of electric tramways for each State during 1941-42 together with similar details for Australia for the last five years.

## ELECTRIC TRAMWAYS : CAPITAL COST AND FINANCIAL RESULTS.

State.	Route-Miles Open at 30th June, 1942.	Capital Cost.	Gross Revenue.	Working Expenses.	Net Revenue.	Interest.	Employees at 30th June, 1942.
STATES, 1941-42.							
	Miles.	£'000.	£'000.	£'000.	£'000.	£'000.	No.
New South Wales ..	162.20	8,609	3,802	3,336	466	365	8,804
Victoria ..	169.05	8,471	2,937	1,690	1,247	213	4,546
Queensland ..	62.93	2,421	1,056	734	322	130	1,857
South Australia ..	77.47	4,451	946	684	262	252	1,732
Western Australia ..	69.59	1,804	486	390	96	45	858
Tasmania ..	29.44	675	226	181	45	39	370
Australia ..	570.68	26,431	9,453	7,015	2,438	1,044	18,167

## AUSTRALIA, 1937-38 TO 1941-42.

1937-38 ..	578.16	26,132	7,602	5,783	1,819	1,112	17,464
1938-39 ..	586.14	26,275	7,649	6,089	1,560	1,092	17,207
1939-40 ..	567.57	26,355	7,679	6,062	1,617	1,098	16,983
1940-41 ..	569.11	26,210	8,150	6,144	2,006	1,086	17,783
1941-42 ..	570.68	26,431	9,453	7,015	2,438	1,044	18,167

(ii) *Traffic and Accidents.* Particulars of the traffic of electric tramways and the accidents which occurred in the movement of rolling stock are shown in the following table for each State during 1941-42, and for Australia during the last five years :—

## ELECTRIC TRAMWAYS : TRAFFIC AND ACCIDENTS.

State.	Average Mileage Open for Year.		Car- Miles Run.	Passenger- Journeys.	Average Number Passengers per Car- Mile.	Accidents.	
	Route.	Track.				Persons.	
						Killed.	Injured.

## STATES, 1941-42.

	Miles.	Miles.	'000.	'000.	No.	No.	No.
New South Wales	162.20	305.27	233,000	375,643	11.38	53	2,068
Victoria ..	169.05	313.06	24,351	253,368	10.40	36	696
Queensland ..	62.25	110.64	8,744	112,448	12.86	4	426
South Australia ..	77.47	145.86	9,287	69,131	7.44	8	146
Western Australia	69.59	107.31	5,295	49,449	9.34	9	253
Tasmania ..	29.44	44.33	2,160	18,977	8.78	4	16
Australia ..	570.00	1,026.47	82,837	879,016	10.61	114	3,605

(a) Estimated.

ELECTRIC TRAMWAYS: TRAFFIC AND ACCIDENTS—*continued.*

State.	Average Mileage Open for Year.		Car-Miles Run.	Passenger-Journeys.	Average Number Passengers per Car-Mile.	Accidents.	
	Route.	Track.				Persons.	
						Killed.	Injured.
AUSTRALIA, 1937-38 TO 1941-42.							
1937-38 ..	577.57	1,044.74	81,038	689,286	8.51	71	2,853
1938-39 ..	585.37	1,045.59	81,361	695,476	8.55	61	2,750
1939-40 ..	566.73	1,022.60	78,207	694,957	8.89	78	2,925
1940-41 ..	569.11	1,022.35	78,347	741,292	9.46	80	2,921
1941-42 ..	570.00	1,026.47	82,837	879,016	10.61	114	3,605

## D. MOTOR VEHICLES.

1. **Motor Industry.** Although motor cars are not entirely manufactured in Australia the capital invested in assembling and body-building plants is considerable. The importance of the industry is shown by the following figures which relate to the local manufacture of motor bodies and the importation of motor cars, fuel and tyres during the four years ended 1940-41.

## MOTOR VEHICLES, ETC. : LOCAL MANUFACTURE AND IMPORTS.

Particulars.		Unit.	1937-38.	1938-39.	1939-40.	1940-41.
Motor bodies built ..	No.		92,061	79,017	72,504	49,651
	£		7,400,497	6,379,955	5,583,316	3,337,346
Imports—						
Motor bodies ..	No.		646	532	345	50
	£		63,810	56,641	27,315	4,057
Chassis ..	No.		89,632	76,094	66,223	30,168
	£		7,355,586	6,416,949	5,510,931	2,799,668
Crude petroleum ..	Mill. gal.		70	54	(a)	(a)
	£		603,216	448,880		
Petroleum spirit, etc. ..	Mill. gal.		333	345		
	£		5,503,085	5,209,650		
Pneumatic tyres and tubes	lb.		341,178	322,764	(a)	(a)
	£		30,968	28,094		

(a) Not available for publication.

2. **Registration.**—The arrangements for the registration of motor vehicles and the licensing of drivers and riders thereof are not uniform throughout Australia. Methods of registration, licence fees payable, etc., in each State are referred to in Official Year Book No. 16, pp. 337-40, and later issues up to No. 25.

3. **Public Vehicles.**—In all the capital cities of the States and in many of the most important provincial centres taxi-cabs and other vehicles ply for hire under licence granted either by the Commissioner of Police or the Local Government authority concerned. As most of these vehicles are independently controlled by individuals or small companies, it has not been possible to obtain complete data in respect of their operations.

4. **Motor Omnibuses.**—In both urban and provincial centres motor omnibus traffic has assumed considerable proportions during recent years, and has had a marked effect on railway and tramway services. The constitution of Boards empowered to



allocate the routes over which omnibuses may operate arose from the belief that the economic waste resulting from duplication, by running services parallel with or contiguous with existing railway and tramway systems, is thus avoided. In some States the railway and tramway systems run motor services complementary to their main services to meet the competition of private enterprise and to endeavour to protect the existing transport utilities provided by public bodies. In addition, there has been a considerable replacement, during the last few years, of existing tramway services by trolley-bus and motor-bus services.

5. Motor Vehicles on the Register, etc.—(i) Year 1941-42. Particulars of the registration of motor vehicles, licences issued and revenue received for 1941-42 are contained in the following table:—

**MOTOR VEHICLES : REGISTRATIONS AND REVENUE, 1941-42.**  
(Excluding Defence Service Vehicles.)

State or Territory.	Motor Vehicles Registered at 30th June, 1942.(a)					Drivers' and Riders' Licences in force at 30th June, 1942.	Gross Revenue derived from—			
	Motor Cars.(b)	Commercial Vehicles (c)	Motor Cycles.	Total.	Per 1,000 of Population at 30th June, 1942.		Vehicle Registrations and Motor Tax.	Drivers' and Riders', etc., Licences.	Other Sources.	Total
	No.	No.	No.	No.	No.	No.	£	£	£	£
N. South Wales	171,268	72,138	15,323	258,729	91.47	427,910	2,235,717	214,738	77,995	2,528,450
Victoria ..	123,649	48,589	16,692	224,930	114.25	339,334	1,563,660	85,053	35,895	1,684,608
Queensland ..	60,929	43,029	5,566	109,524	105.52	209,412	793,376	52,709	50,623	896,768
South Australia	49,887	21,897	5,359	77,143	127.04	106,455	446,919	53,674	14,051	514,644
Western Aust.	29,048	21,729	4,052	54,829	116.56	73,364	324,702	23,328	30,536	378,566
Tasmania ..	14,189	5,438	2,244	21,871	91.15	25,282	150,788	12,641	22,461	185,890
Northern Terr.	464	1,270	162	1,896	212.56	2,182	3,191	901	..	4,092
Aust. Cap. Terr.	1,417	425	69	1,911	154.55	2,733	10,272	1,469	143	11,884
<b>Australia ..</b>	<b>450,851</b>	<b>250,515</b>	<b>49,467</b>	<b>750,833</b>	<b>104.66</b>	<b>1,186,672</b>	<b>5,528,625</b>	<b>444,573</b>	<b>231,704</b>	<b>6,204,902</b>

(a) Excludes Trailers (22,863), Road Tractors, etc. (2,605), and Dealers' Plates (1,727).  
(b) Includes Taxis and Hire Cars. (c) Includes Lorries, Vans, Buses and Utility Trucks.  
(d) Includes 49,521 vehicles registered as primary producers'.

Particulars relating to the number of motor vehicles registered at 30th June, 1943, will be found in the Appendix to this volume.

(ii) *Quinquennium* 1937-38 to 1941-42. The following table shows the number of vehicles registered, licences issued, and revenue received therefrom during each of the years 1937-38 to 1941-42:—

**MOTOR VEHICLES : REGISTRATIONS AND REVENUE, AUSTRALIA.**  
(Excludes Defence Service Vehicles.)

Year.	Motor Vehicles Registered at 30th June.					Drivers' and Riders' Licences in force at 30th June.	Gross Revenue derived from—			
	Motor Cars.	Commercial Vehicles.	Motor Cycles.	Total.	Per 1,000 of Population at 30th June.		Vehicle Registrations and Motor Tax.	Drivers' and Riders', etc., Licences.	Other Sources.	Total.
	No.	No. (a)	No.	No.	No.	No.	£	£	£	£
1937-38	534,963	241,751	80,114	856,828	124.30	1,175,786	5,884,847	470,053	234,161	6,589,061
1938-39	562,271	258,025	79,237	899,533	129.23	1,238,497	6,318,435	508,387	244,722	7,071,544
1939-40	550,533	260,994	74,106	885,633	127.29	1,260,781	6,520,693	505,383	271,300	7,306,375
1940-41	538,483	262,141	70,918	871,542	122.71	1,260,193	6,562,350	496,670	275,911	7,334,931
1941-42	450,851	250,515	49,467	750,833	104.66	1,186,672	5,528,625	444,573	231,704	6,204,902

(a) Includes primary producers' vehicles, Victoria.

(iii) *Relation to Population.* The table hereunder gives the number of vehicles (excluding motor cycles) registered per 1,000 of population in each State at 31st December, 1921, and at 30th June for each of the years 1938 to 1942 :—

### MOTOR VEHICLES (EXCLUDING MOTOR CYCLES) REGISTERED PER 1,000 OF POPULATION.

(Excludes Defence Service Vehicles.)

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
31st Dec., 1921 ..	15	16	8	24	12	13	(a)	..	15
30th June, 1938 ..	103	120	111	135	128	90	206	159	113
„ 1939 ..	107	125	118	137	134	96	221	182	118
„ 1940 ..	103	127	119	135	137	95	192	181	117
„ 1941 ..	100	120	116	131	132	96	195	163	113
„ 1942 ..	86	106	100	118	108	82	176	149	98

(a) Not available.

(iv) *Revenue per Motor Vehicle.* The following table gives the average revenue per vehicle (excluding motor cycles) received in respect of registration and motor tax in the several States for each year from 1937-38 to 1941-42. In some States the revenue from motor tax on cycles is not separately recorded. In these cases an amount based on the flat rate provided for cycles in the registration acts has been deducted from the total revenue received, and the average amounts shown must therefore be regarded as approximate only. Registration fees and motor taxes were reduced, during the year 1941-42, in the States of New South Wales, Victoria and Western Australia. In South Australia the reduction was made in the last half of 1940-41. The reduction was generally 25 per cent., except in the case of New South Wales, where it was 20 per cent. In July, 1942, Australian Capital Territory fees were reduced by 15 per cent.

### AVERAGE REVENUE PER VEHICLE FROM REGISTRATION FEES AND MOTOR TAX (EXCLUDING MOTOR CYCLES).

State or Territory.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales ..	7 17 11	7 19 10	8 11 5	9 1 4	8 18 2
Victoria ..	7 5 11	7 6 0	7 7 0	7 8 6	7 4 7
Queensland ..	6 5 10	6 15 11	7 6 5	7 7 10	7 8 1
South Australia ..	7 4 7	7 9 10	7 6 11	7 15 6	5 19 8
Western Australia ..	6 5 2	6 6 0	6 2 6	6 8 1	6 4 8
Tasmania ..	5 17 6	6 13 3	7 5 1	7 5 1	7 6 3
Northern Territory ..	1 8 1	1 11 0	1 15 2	1 19 8	1 18 6
Aust. Cap. Territory	5 18 7	5 15 2	5 16 11	5 16 10	5 8 1
Australia ..	7 4 7	7 7 9	7 13 2	7 18 6	7 12 5

6. New Vehicles Registered.—(i) Year 1941-42. The following table gives the number of new vehicles registered in each State during 1941-42:—

### NEW MOTOR VEHICLES REGISTERED, 1941-42.

(Excludes Defence Service Vehicles.)

State or Territory.	Motor Cars.	Commercial Vehicles, etc.	Motor Cycles.	Total.
	No.	No.	No.	No.
New South Wales .. .. .	1,432	1,747	352	3,531
Victoria .. .. .	1,244	(a) 1,590	270	3,104
Queensland .. .. .	421	841	81	1,343
South Australia(b) .. .. .	495	486	124	1,105
Western Australia .. .. .	277	364	79	720
Tasmania .. .. .	127	156	13	296
Australian Capital Territory .. .. .	9	4	4	17
<b>Total .. .. .</b>	<b>4,005</b>	<b>5,188</b>	<b>923</b>	<b>10,116</b>

(a) Includes vehicles registered as primary producers'.

(b) Excludes Northern Territory.

Particulars of the number of new vehicles registered during 1942-43 will be found in the Appendix to this volume.

(ii) *Quinquennium* 1937-38 to 1941-42. Particulars of the number of new vehicles registered in Australia during the years 1937-38 to 1941-42 are shown in the following table:—

### NEW MOTOR VEHICLES REGISTERED : AUSTRALIA.(a)

(Excludes Defence Service Vehicles.)

Year.	Motor Cars.	Commercial Vehicles, etc. (b)	Motor Cycles.	Total.
	No.	No.	No.	No.
1937-38 .. .. .	55,125	27,402	8,323	90,850
1938-39 .. .. .	54,107	24,927	7,370	86,404
1939-40 .. .. .	40,325	19,724	4,517	64,566
1940-41 .. .. .	17,765	10,168	2,589	30,522
1941-42 .. .. .	4,005	5,188	923	10,116

(a) Excludes Northern Territory; also extra-Metropolitan area of Western Australia prior to 1938-39.

(b) Includes vehicles registered as primary producers' vehicles, Victoria.

## E. TRAFFIC ACCIDENTS.

1. *General*.—The practice of reporting accidents occurring in public thoroughfares is not uniform throughout Australia. In New South Wales the reporting of minor accidents has not been enforced, while all other States require that all accidents be reported. Hence the figures for New South Wales are not comparable with those for other States with regard to the number of accidents, and to a lesser extent with regard to the number of persons injured.



2. Total Accidents Registered.—(i) Year 1941-42. The following table gives particulars of the number of persons killed or injured in accidents (known to the police) which occurred in public thoroughfares during 1941-42 :—

**ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES : PERSONS KILLED AND INJURED, 1941-42.**

State or Territory.	Accidents.	Persons Killed.			Persons Injured.		
		Number.	Per 1,000 of Mean Population.	Per 100 Motor Vehicles Registered.	Number.	Per 1,000 of Mean Population.	Per 100 Motor Vehicles Registered.
New South Wales	7,773	473	0.17	0.18	5,548	1.97	2.14
Victoria ..	11,055	396	0.20	0.18	5,836	2.99	2.59
Queensland ..	5,861	137	0.13	0.13	2,657	2.57	2.43
South Australia ..	7,582	127	0.21	0.16	2,163	3.57	2.80
Western Australia	2,984	122	0.26	0.22	562	1.20	1.03
Tasmania ..	2,641	35	0.15	0.16	730	3.05	3.34
Aus. Cap. Territory	33	..	..	..	33	2.63	1.73
<b>Total ..</b>	<b>37,929</b>	<b>1,290</b>	<b>0.18</b>	<b>0.17</b>	<b>17,529</b>	<b>2.46</b>	<b>2.34</b>

The ages of the persons killed or injured are given below :—

**AGES OF PERSONS KILLED OR INJURED, 1941-42.**

State or Territory.	Under 10 years.		10 to 59 years.		60 years and over.		Age not known.		Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
New S. Wales	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	473	5,548
Victoria ..	27	439	271	4,502	85	608	13	287	396	5,836
Queensland ..	(b) 12	(b) 400	(c) 94	(c) 1,995	31	253	..	9	137	2,657
South Aust. ..	12	146	88	1,859	27	158	..	..	127	2,163
Western Aust.	(d) 13	(d) 91	(e) 90	(e) 434	(f) 19	(f) 37	..	..	122	562
Tasmania ..	70	..	(g) 640	..	(f) 55	..	..	..	35	730
Aus. Cap. Terr.	..	..	..	33	..	..	..	..	..	33
<b>Total ..</b>	(h) 1,210	..	(h) 10,006	..	(h) 1,273	..	(h) 13	(h) 296	1,290	17,529

(a) Not available. (b) Under 15. (c) Fifteen to 59. (d) Under 16. (e) Sixteen to 60. (f) Over 60. (g) Ten to 60. (h) Incomplete.

(ii) Years 1933-34 to 1941-42. Approximate figures relating to the persons killed and injured in traffic accidents in Australia during the years 1933-34 to 1941-42 are given hereunder :—

**ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES : PERSONS KILLED AND INJURED, AUSTRALIA.(a)**

Particulars.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Persons killed ..	912	1,104	1,356	1,391	1,483	1,426	1,560	1,298	1,290
„ injured ..	17,536	19,189	22,126	22,940	25,097	25,653	26,142	23,340	17,529

(a) Prior to 1935 figures were compiled by three States for the calendar year, and by one State for the years 1935 and 1936.

For further particulars of Traffic Accidents see *Transport and Communication Bulletin* No. 33.

# F. AVIATION.

1. **Historical.**—A short review of the progress of civil aviation in Australia up to the date of foundation of a Civil Aviation Administration appears in Official Year Book No. 16, pp. 334-5.

2. **Civil Aviation Administration.**—A brief account of the foundation and objects of this Administration will be found in Official Year Book No. 19, p. 299. In 1936 the organization was changed and the responsibility of regulating and controlling civil aviation in Australia was entrusted to a Board, consisting of four members and a secretary. The Board was responsible to the Minister for Defence and continued to function as a unit of the Defence Department organization until November, 1938. In January, 1939, the Civil Aviation Board was abolished and the Civil Aviation Administration was made a separate Department under the Minister for Civil Aviation. The permanent Head of the Department is the Director-General of Civil Aviation.

3. **Air Services.**—Owing to the Censorship provisions the detailed paragraphs previously shown dealing with the services are omitted.

4. **Statistical Summary.**—The collection and compilation of aircraft statistics were undertaken by this Bureau on 1st July, 1922. The following table gives a summary of operations for the five years ended 30th June, 1942. Figures shown exclude, as far as possible, the operations of aircraft chartered for Defence purposes.

CIVIL AVIATION IN AUSTRALIA : SUMMARY.

Particulars.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Registered aircraft owners					
(a) .. .. . No.	139	149	137	120	119
Registered aircraft(a) ..	286	296	288	202	192
Licensed pilots—(a) ..					
Private .. .. .	937	1,096	(b) 1,225	502	240
Commercial .. ..	323	346	(b) 324	187	181
Licensed navigators(a) ..	47	59	(b) 85	76	54
Licensed aircraft radio telegraph operators(a) No.	23	75	(b) 91	58	60
Licensed aircraft radio telephone operators(a) No.	5	..	..	38	38
Licensed ground engineers (a) .. .. . No.	437	525	(b) 651	617	717
Aerodromes—(a) ..					
Government .. ..	74	71	73	79	72
Public .. .. .	197	213	224	212	207
Government emergency grounds .. .. . No.	153	147	141	116	116
Hours flown .. .. .	113,647	121,935	120,133	79,164	69,302
Approx. mileage miles '000	12,292	14,099	12,823	9,700	8,925
Passengers carried—					
Paying .. .. . No.	133,408	123,566	121,700	145,666	149,791
Non-paying .. ..	25,495	24,353	21,097	8,593	5,422
Total .. .. . No.	158,903	147,919	142,797	154,259	155,213
Freight carried .. lb. '000	1,169	1,735	1,771	2,115	2,588
Mails, .. .. .	227	(c) 739	(c) 416	(c) 547	(c) 879
Accidents—					
Persons—killed ..	10	38	11	3	18
injured .. .. .	4	15	6	1	3

(a) At 30th June. of oversea mail.

(b) Includes licences issued for New Guinea.

(c) Includes gross weight

Preliminary figures relating to the operations of civil aircraft in Australia during 1942-43 will be found in the Appendix to this volume.

5. New Guinea Activities.—Previous issues show particulars of the development of civil aviation in New Guinea, and of the companies operating these at the outbreak of war with Japan.

The following table gives a summary of operations for the five years ended 30th June, 1942.

### CIVIL AVIATION IN TERRITORY OF NEW GUINEA: SUMMARY.

Particulars.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Registered aircraft owners					
(a) .. .. . No.	10	10	9	11	1
Registered aircraft(a) ..	40	47	43	41	3
Licensed pilots—(a) ..					
Private .. .. .	12	13	(b)	5	..
Commercial .. ..	24	23	(b)	16	..
Licensed navigators(a) ..	2	3	(b)	4	..
Licensed aircraft radio operators .. .. . No.	..	1	1	2	..
Licensed ground engineers (a) .. .. . No.	37	46	(b)	37	6
Aerodromes—(a) ..					
Government .. ..	21	24	30	40	..
Public .. .. .	19	19	23	18	..
Government emergency landing grounds No.	6	11	13	17	..
Hours flown .. .. .	15,445	15,626	13,814	11,965	(c) 2,508
Approx. mileage miles '000,	1,560	1,456	1,254	1,095	(c) 216
Passengers carried—					
Paying .. .. . No.	12,247	12,909	15,433	12,995	(c) 2,919
Non-paying .. ..	1,017	1,569	1,551	993	(c) 194
Total .. .. .	13,264	14,478	16,984	13,988	(c) 3,113
Freight carried lb. '000,	25,574	27,064	23,500	19,855	(c) 4,124
Mails, .. .. .	167	163	147	101	(c) 21
Accidents—					
Persons—killed No.	1	..	8	2	..
injured .. ..	1	1	1	1	..

(a) At 30th June.  
available.

(b) Not available.

(c) First quarter only. Further particulars not available.

## G. POSTS, TELEGRAPHS AND TELEPHONES.

### § 1. General.

1. The Commonwealth Postal Department.—Under the provisions of the Commonwealth Post and Telegraph Act 1901, the Commonwealth Postal Department was placed under the control of the Postmaster-General, being a responsible Minister. The Director-General of Posts and Telegraphs controls the Department under the Postmaster-General, whilst the principal officer in each State is the Deputy-Director of Posts and Telegraphs.

2. Postal Facilities.—(i) *Relation to Area and Population.* The following statement shows the number of post offices, the area in square miles and the number of inhabitants to each post office (including non-official offices) in each State and in Australia at 30th June, 1942. In order to judge clearly the relative postal facilities provided in each State, the area of country to each office as well as the number of inhabitants per office should be taken into account. The returns given for South Australia in this and all succeeding tables include those for the Northern Territory, and the returns for the Australian Capital Territory are included in those for New South Wales.



**POSTAL FACILITIES : RELATION TO AREA AND POPULATION,  
AT 30th JUNE, 1942.**

State.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
Number of post offices (a) ..	2,519	2,560	1,236	794	616	510	8,235
Number of square miles of territory to each office in State ..	123	34	542	1,138	1,584	51	361
Number of inhabitants to each office	1,127	769	840	776	764	470	871
Number of inhabitants per 100 square miles .. ..	915	2,240	155	68	48	915	241

(a) Includes "official," "semi-official," and "non-official" offices.

The foregoing table does not include "telephone" offices at which there is no postal business.

(ii) *Number of Offices.* The following table shows the number of post offices in each State for the years 1912, 1922, 1932, and 1942 :—

**NUMBER OF POST OFFICES.**

State.	At 31st December—		At 30th June—					
	1912.		1922.		1932.		1942.	
	Official and Semi-Official.	Non-Official. (a)	Official and Semi-Official.	Non-Official. (a)	Official and Semi-Official.	Non-Official. (a)	Official and Semi-Official.	Non-Official. (a)
New South Wales ..	508	2,051	459	2,129	438	1,990	464	2,055
Victoria ..	293	2,281	270	2,306	278	2,270	301	2,259
Queensland ..	214	1,149	211	1,030	199	995	202	1,034
South Australia ..	162	601	139	666	146	617	152	642
Western Australia..	160	360	131	537	124	436	131	485
Tasmania ..	57	389	47	456	43	468	48	462
<b>Australia ..</b>	<b>1,394</b>	<b>6,831</b>	<b>1,257</b>	<b>7,124</b>	<b>1,228</b>	<b>6,776</b>	<b>1,298</b>	<b>6,937</b>

(a) Includes offices previously designated as "Allowance" and "Receiving" Offices.

(iii) *Employees and Mail Contractors.* The number of employees and mail contractors in the Central Office and in each of the States at specified dates is given in the following table :—

**POSTAL EMPLOYEES AND MAIL CONTRACTORS.**

State.	At 31st December—		At 30th June—					
	1912.		1922.		1932.		1942.	
	Em- ployees.	Mail Con- tractors.	Em- ployees.	Mail Con- tractors.	Em- ployees.	Mail Con- tractors.	Em- ployees.	Mail Con- tractors.
Central Office ..	(a)	..	87	..	175	..	491	..
New South Wales ..	12,614	1,798	12,451	2,087	12,357	2,010	19,795	2,375
Victoria ..	7,845	1,060	8,553	1,095	9,490	1,103	16,028	1,641
Queensland ..	3,942	768	4,792	766	4,818	832	7,506	1,423
South Australia ..	2,173	364	2,895	441	3,252	242	4,952	538
Western Australia..	2,246	251	2,200	338	2,564	309	3,932	426
Tasmania ..	1,094	217	1,229	236	1,398	238	1,862	218
<b>Australia ..</b>	<b>29,914</b>	<b>4,458</b>	<b>32,207</b>	<b>4,963</b>	<b>34,054</b>	<b>4,734</b>	<b>54,566</b>	<b>6,621</b>

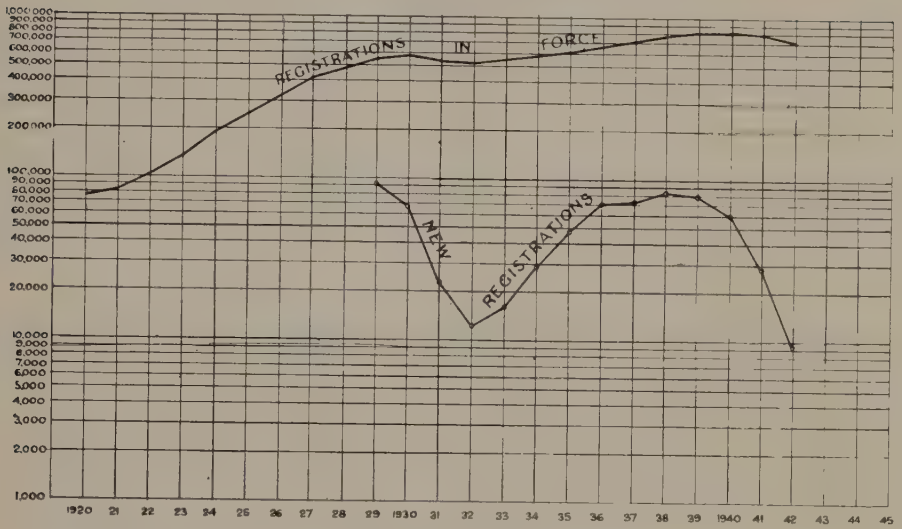
(a) Included in Victorian Staff.

3. **Gross Revenue, Branches—Postmaster-General's Department.** The gross revenue (actual collections) in respect of each branch of the Department during each of the last five years is shown in the table hereunder:—

**POSTMASTER-GENERAL'S DEPARTMENT : GROSS REVENUE.**

Branch and Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
<b>Postal—</b>							
1937-38 ..	2,992	2,010	1,039	550	491	208	7,290
1938-39 ..	3,048	2,042	1,067	552	502	211	7,422
1939-40 ..	3,025	2,082	1,078	564	489	207	7,445
1940-41 ..	3,350	2,274	1,090	595	497	206	8,012
1941-42 ..	3,794	2,753	1,322	768	588	250	9,475
<b>Telegraph—</b>							
1937-38 ..	508	342	231	117	143	37	1,378
1938-39 ..	502	341	234	118	139	38	1,372
1939-40 ..	511	367	236	117	136	34	1,401
1940-41 ..	551	409	233	120	137	32	1,482
1941-42 ..	676	492	308	157	163	33	1,829
<b>Wireless—</b>							
1937-38 ..	185	156	52	51	33	16	493
1938-39 ..	198	152	59	53	36	18	516
1939-40 ..	207	161	67	56	39	19	549
1940-41 ..	269	199	89	70	47	24	698
1941-42 ..	252	157	85	70	47	24	635
<b>Telephone—</b>							
1937-38 ..	3,083	2,192	1,024	669	415	189	7,572
1938-39 ..	3,261	2,352	1,098	696	431	202	8,040
1939-40 ..	3,443	2,487	1,137	740	453	223	8,483
1940-41 ..	3,609	2,648	1,169	748	468	226	8,868
1941-42 ..	3,914	2,919	1,274	829	503	248	9,687
<b>All Branches—</b>							
1937-38 ..	6,768	4,700	2,346	1,387	1,082	450	16,733
1938-39 ..	7,009	4,887	2,458	1,419	1,108	469	17,350
1939-40 ..	7,186	5,097	2,518	1,477	1,117	483	17,878
1940-41 ..	7,779	5,530	2,580	1,534	1,150	487	19,060
1941-42 ..	8,637	6,321	2,989	1,824	1,300	555	21,626
<b>Total revenue per capita—</b>							
	£	£	£	£	£	£	£
1937-38 ..	2.48	2.52	2.34	2.32	2.35	1.92	2.43
1938-39 ..	2.55	2.61	2.44	2.36	2.40	1.98	2.50
1939-40 ..	2.59	2.70	2.47	2.45	2.40	2.02	2.56
1940-41 ..	2.78	2.88	2.50	2.53	2.46	2.03	2.70
1941-42 ..	3.06	3.23	2.89	2.97	2.77	2.32	3.03

MOTOR VEHICLE REGISTRATION—AUSTRALIA, 1920 TO 1942.



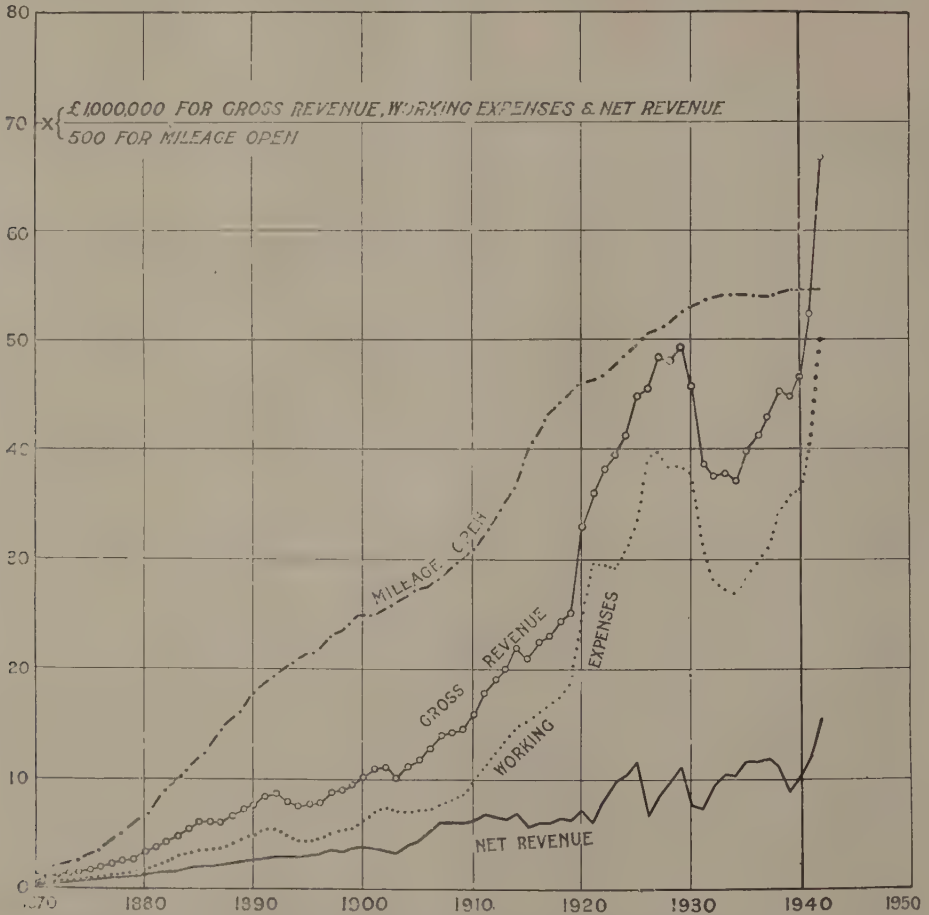
(See page 129.)

EXPLANATION.—This is a ratio graph, the vertical scale being logarithmic, and the curves rise and fall according to the rate of increase or decrease. Actual numbers are indicated by the scale at the side of the graph.

The graphs show for all motor vehicles other than motor cycles the registrations in force at 30th June each year and the number of new registrations during the year.



## FINANCIAL POSITION OF THE GOVERNMENT RAILWAYS OF AUSTRALIA, 1870 TO 1942.



EXPLANATION.—The base of each square represents throughout ten years. The significance of the vertical height of each square varies according to the nature of the several curves.

In the curves for (i) gross revenue; (ii) working expenses; and (iii) net revenue, the vertical side of each square represents £10,000,000. The mileage open is shown by a broken line, the vertical side of each square representing 5,000 miles.

Compared with the corresponding figures for the previous year, an increase of 13.4 per cent. is shown in the gross revenue earned for the year 1941-42. Increases in the several branches were as follows:—Postal 18.3 per cent., Telegraph 23.3 per cent., and Telephone 9.2 per cent. The Wireless Branch showed a decrease of 9.0 per cent.

4. **Expenditure, Postmaster-General's Department.**—(i) *Distribution.* The following table shows, as far as possible, the distribution of actual expenditure on various items in each State during the year ended 30th June, 1942. The table must not be regarded as a statement of the working expenses of the Department, since items relating to new works, interest, etc. are included therein.

**POSTMASTER-GENERAL'S DEPT. : DISTRIBUTION OF EXPENDITURE, 1941-42.**

Particulars.	Central Office.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£	£
<b>Expenditure from Ordinary Votes—</b>								
Salaries and payments in the nature of salary ..	64,491	2,589,842	1,837,095	963,728	636,650	459,306	223,583	6,774,695
General expenses ..	3,479	209,257	151,212	50,696	53,408	31,106	12,100	511,348
Stores and material ..	2,181	89,037	69,542	40,038	25,899	18,744	6,971	252,412
Mail services ..	a 782,598	453,767	296,677	227,628	85,260	89,340	40,993	1,976,263
Engineering services (other than New Works) ..	86,138	1,561,953	1,115,140	532,795	300,196	283,200	148,216	4,027,638
Other services ..	60,662	..	..	..	..	..	..	60,662
<b>Total ..</b>	<b>999,549</b>	<b>4,903,856</b>	<b>3,469,666</b>	<b>1,814,885</b>	<b>1,101,413</b>	<b>881,696</b>	<b>431,953</b>	<b>13,603,018</b>
Pensions and retiring allowances ..	..	15,153	18,917	..	..	22,518	..	56,588
Rent, repairs, maintenance, fittings, etc.	..	36,287	43,660	20,252	7,153	8,040	2,790	118,182
Proportion of audit expenses ..	..	5,188	3,577	1,913	1,126	864	432	13,100
<b>New Works(b) —</b>								
Telegraph, telephone and wireless ..	1,384	1,039,415	765,800	319,941	152,000	110,500	56,304	2,445,344
New Buildings, etc.	..	277,191	75,897	63,876	84,650	19,507	6,669	527,790
Other expenditure not allocated to States	3,736,977 (c)	..	..	..	..	..	..	3,736,977
<b>Grand Total ..</b>	<b>4,737,910 (d)</b>	<b>6,277,090</b>	<b>4,377,517</b>	<b>2,220,867</b>	<b>1,346,342</b>	<b>1,043,125</b>	<b>498,148</b>	<b>20,500,999</b>

(a) Expenditure on air-mail services, etc. of apportionment to States not available.

(b) Includes expenditure from loan.

(c) Particulars

(d) Includes expenditure not apportioned to States.

(ii) *Total, 1937-38 to 1941-42.* The next table gives the actual payments made, as shown by records kept for Treasury purposes in respect of the Postmaster-General's Department, for each of the last five years:—

**POSTMASTER-GENERAL'S DEPARTMENT : EXPENDITURE.**

—	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
<b>Total Expenditure ..</b>	<b>17,135,560</b>	<b>18,873,934</b>	<b>18,475,805</b>	<b>19,116,132</b>	<b>20,500,999</b>

The total expenditure increased by 7.2 per cent. during 1941-42.

5. Profit or Loss, Postmaster-General's Department.—(i) *States, 1941-42.* The foregoing statement of gross revenue and expenditure represents actual collections and payments made and cannot be taken to represent the actual results of the working of the Department for the year. The net results for each branch in the several States, after providing for working expenses, depreciation and interest charges, including exchange, were as follows :—

POSTMASTER-GENERAL'S DEPARTMENT : PROFIT OR LOSS, 1941-42.

Branch.	Profit or Loss.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
		£	£	£	£	£	£	£
Postal ..	{ Profit	1,123,455	915,793	436,568	234,454	140,579	65,494	2,916,343
	{ Loss	..	..	..	..	..	..	..
Telegraph ..	{ Profit	162,888	165,998	47,394	..	30,334	267	404,005
	{ Loss	..	..	..	2,876	..	..	..
Wireless ..	{ Profit	23,979	20,268	5,138	29,078	..	..	58,477
	{ Loss	..	..	..	..	13,222	6,764	..
Telephone ..	{ Profit	1,046,494	735,360	213,789	140,161	19,470	..	2,139,968
	{ Loss	..	..	..	..	..	15,306	..
All Branches ..	{ Profit	2,356,816	1,837,419	702,889	400,817	177,161	43,691	5,518,793
	{ Loss	..	..	..	..	..	..	..

After providing for depreciation, pensions and retiring allowances and interest on capital, the year 1941-42 closed with a surplus of £5,518,793. For the preceding year a surplus of £4,067,746 was shown.

(ii) *Branches, 1937-38 to 1941-42.* The following statement gives particulars of the operating results of each branch for the period 1937-38 to 1941-42 :—

POSTMASTER-GENERAL'S DEPARTMENT : PROFIT OR LOSS, BRANCHES.

Year.	Branch Profits—				
	Postal.	Telegraph.	Wireless.	Telephone.	All Branches.
	£	£	£	£	£
1937-38.. ..	2,094,561	73,020	82,211	1,283,684	3,533,476
1938-39.. ..	2,105,208	51,617	76,054	1,392,492	3,625,371
1939-40.. ..	1,998,145	108,283	13,256	1,638,881	3,758,565
1940-41.. ..	2,174,737	104,797	113,301	1,674,911	4,067,746
1941-42.. ..	2,916,343	404,005	58,477	2,139,968	5,518,793



6. Capital Account.—The appended statement shows particulars of the fixed assets of the Postmaster-General's Department from 1st July, 1941, to 30th June, 1942 :—

POSTMASTER-GENERAL'S DEPARTMENT : FIXED ASSETS.

Particulars.	Net Value, 1st July, 1941.	Capital Expenditure 1941-42.	Gross Value, 30th June, 1942.	Less Deprecia- tion, &c. 1941-42. (a)	Net Value, 30th June, 1942.
	£	£	£	£	£
Telephone service plant (ex- cluding trunk lines) ..	44,174,851	2,747,693	46,922,544	809,909	46,112,635
Trunk and telegraph service plant (aerial wires, conduits, and cables) ..	13,356,358	419,995	13,776,353	88,380	13,687,973
Telegraph service plant ..	498,509	49,321	547,830	13,149	534,681
Postal service plant ..	456,140	39,386	495,526	1,924	493,602
Wireless service plant ..	593,172	30,844	624,016	4,680	619,336
Sites, buildings, furniture and office equipment ..	11,350,636	482,006	11,832,642	61,332	11,771,310
Miscellaneous plant ..	1,050,271	75,976	1,126,247	44,441	1,081,806
<b>Total</b> ..	<b>71,479,937</b>	<b>3,845,221</b>	<b>75,325,158</b>	<b>1,023,815</b>	<b>74,301,343</b>

(a) Includes dismantled assets, depreciation written off, and assets transferred.

During the past quinquennium the value of the fixed assets has increased by 27.1 per cent., the net value at 30th June, 1937, being £58,481,814.

## § 2. Posts.

1. Postal Matters Dealt With.—(i) *Australia*. The following table gives a summary of the postal matter dealt with in Australia during the five years 1937-38 to 1941-42. Although mail matter posted in Australia for delivery therein is necessarily handled at least twice, only the number dispatched are included in the following table, which consequently gives the number of distinct articles handled :—

POSTAL MATTER DEALT WITH : AUSTRALIA.

Year.	Letters, Postcards, Letter-cards and Packets.		Newspapers.		Parcels.		Registered Articles other than Parcels.	
	Number (‘000 omitted).	Per 1,000 of Popula- tion.	Number (‘000 omitted).	Per 1,000 of Popula- tion.	Number (‘000 omitted).	Per 1,000 of Popu- lation.	Number (‘000 omitted).	Per 1,000 of Popu- lation.

POSTED WITHIN AUSTRALIA FOR DELIVERY THEREIN.

1937-38	..	825,128	119,704	138,129	20,039	9,072	1,316	7,439	1,079
1938-39	..	836,243	120,717	139,635	20,157	9,056	1,307	7,474	1,079
1939-40	..	834,113	119,295	138,900	19,866	9,065	1,296	7,780	1,113
1940-41	..	845,963	119,686	140,721	19,909	9,933	1,405	8,914	1,261
1941-42	..	888,882	124,541	138,285	19,375	10,993	1,540	10,618	1,488
		(a)		(b)					

TOTAL POSTAL MATTER DEALT WITH.

1937-38	..	889,771	129,082	162,682	23,601	9,572	1,389	8,489	1,231
1938-39	..	903,090	130,367	165,362	23,871	9,585	1,384	8,371	1,208
1939-40	..	881,910	126,131	157,677	22,551	9,484	1,356	8,512	1,218
1940-41	..	898,688	127,145	160,593	22,720	11,194	1,584	9,560	1,353
1941-42	..	941,816	131,957	158,059	22,146	13,075	1,832	11,118	1,558
		(a)		(b)					

(a) Includes letters, cards and other postal articles enclosed in envelopes and sorted with letters

(b) Includes postal articles not included in letter mail.

(ii) *States.* The next table shows the postal matter dealt with in each State during the year 1941-42.

POSTAL MATTER DEALT WITH : STATES 1941-42.(a)

State.	Letters, Postcards, Letter-cards and Packets.(b)		Newspapers.(b)		Parcels.		Registered Articles other than Parcels.	
	Number (‘000 omitted).	Per 1,000 of Popula- tion.	Number (‘000 omitted).	Per 1,000 of Popula- tion.	Number (‘000 omitted).	Per 1,000 of Popula- tion.	Number (‘000 omitted).	Per 1,000 of Popula- tion.
POSTED FOR DELIVERY WITHIN AUSTRALIA.								
New South Wales	360,583	130,817	58,343	20,051	4,220	1,497	4,122	1,459
Victoria ..	253,379	120,652	35,348	18,087	2,421	1,239	3,130	1,602
Queensland ..	111,274	107,510	23,386	22,500	2,233	2,206	1,488	1,438
South Australia ..	60,425	108,034	8,908	14,634	1,186	1,929	826	1,343
Western Australia	55,520	118,400	7,205	15,508	715	1,526	666	1,421
Tasmania ..	32,695	136,577	4,915	20,532	159	664	386	1,612
Australia ..	888,882	124,541	138,285	19,375	10,993	1,540	10,618	1,488

POSTED FOR DELIVERY OVERSEAS.

New South Wales	13,492	4,776	3,366	1,191	756	268	125	44
Victoria ..	8,258	4,226	2,468	1,263	479	245	55	28
Queensland ..	2,195	2,121	637	615	164	158	25	24
South Australia ..	1,800	2,928	624	1,015	131	213	8	13
Western Australia	2,633	5,619	1,782	3,803	107	228	15	32
Tasmania ..	1,180	4,929	19	79	44	184	4	17
Australia ..	29,558	4,141	8,896	1,247	1,681	236	232	32

RECEIVED FROM OVERSEAS.

New South Wales	12,818	4,537	5,116	1,811	163	58	128	45
Victoria ..	4,668	2,389	2,092	1,070	134	69	80	41
Queensland ..	2,508	2,423	877	847	34	33	23	22
South Australia ..	1,743	2,835	758	1,233	37	60	16	26
Western Australia	1,402	2,992	1,753	3,741	24	51	17	36
Tasmania ..	237	990	282	1,178	9	38	4	17
Australia ..	23,376	3,275	10,878	1,524	401	56	268	38

(a) See explanation in paragraph 1.—(1).

(b) See notes (a) and (b) to previous table.

2. *Value-Payable Parcel Post.*—(i) *General.* The Postal Department undertakes to deliver registered articles sent by parcel post within Australia, or between Papua or Nauru and Australia, to recover from the addressee on delivery a specified sum of money fixed by the sender, and to remit the sum to the sender by money order, for which the usual commission is charged. The object of the system is to meet the requirements of persons who wish to pay at the time of receipt for articles sent to them, also to meet the requirements of traders and others who do not wish their goods to be delivered except on payment.

(ii) *Summary of Business.* The next statement gives particulars regarding the value-payable parcels posted in each State for the years 1937-38 to 1941-42:—

**VALUE-PAYABLE PARCEL POST : SUMMARY OF BUSINESS.**

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
<b>NUMBER OF PARCELS POSTED.</b>							
	No.	No.	No.	No.	No.	No.	No.
1937-38 .. ..	328,459	34,681	184,080	20,592	70,719	1,168	639,699
1938-39 .. ..	332,419	36,000	175,376	20,596	67,852	849	633,092
1939-40 .. ..	346,327	60,417	180,215	22,697	68,883	670	679,209
1940-41 .. ..	361,388	103,459	186,524	23,912	59,273	866	735,422
1941-42 .. ..	398,459	104,828	184,843	25,014	55,746	1,090	769,980

**VALUE COLLECTED.**

	£	£	£	£	£	£	£
1937-38 .. ..	395,969	48,250	232,797	24,124	78,196	1,591	780,927
1938-39 .. ..	405,844	50,224	226,409	22,962	76,323	1,143	782,905
1939-40 .. ..	417,046	88,225	232,873	27,844	72,250	831	839,069
1940-41 .. ..	486,927	172,183	249,323	31,893	70,017	1,411	1,011,754
1941-42 .. ..	515,672	180,248	262,586	37,463	68,161	2,165	1,066,295

**REVENUE INCLUDING POSTAGE, COMMISSION ON VALUE, REGISTRATION AND MONEY ORDER COMMISSION.**

	£	£	£	£	£	£	£
1937-38 .. ..	41,958	4,672	23,816	2,507	8,102	139	81,194
1938-39 .. ..	45,097	4,867	24,881	2,587	8,207	102	85,741
1939-40 .. ..	45,702	8,566	24,741	2,792	7,382	76	89,259
1940-41 .. ..	49,182	16,922	25,680	3,133	6,715	104	101,736
1941-42 .. ..	53,027	16,591	24,961	3,628	6,480	137	104,824

The number and value of parcels forwarded in New South Wales and Queensland are much higher than in any of the other States, although the system has also found favour in Western Australia. These three States have the largest areas, and consequently more people, at long distances from business centres, avail themselves of the value-payable system. Although South Australia also has a large area, the population of that State is, comparatively, not widely spread.

3. *Sea-borne Mail Services.*—(i) *General.* In earlier issues of this work particulars of sea-borne mail services have been included, but owing to the restrictions of space the insertion of this information terminated with Official Year Book No. 22

(ii) *Annual Subsidies or Payments.* The following table shows particulars of the annual subsidies or amounts payable by the Postal Department for coastal mail services in accordance with contracts in existence at 30th June, 1942. The frequency of the services concerned was irregular during 1941-42.

**MAIL SUBSIDIES : COASTAL SERVICES, 1941-42.**

Service.	Queensland Ports.	South Australian Ports.	Western Australian Ports.	Tasmanian Ports.
	£	£	£	£
Annual subsidies or payments	875	5,000	5,500	54,379



4. **Total Cost of Carriage of Mails.**—During 1941-42 the total amount paid for the carriage of mails, as disclosed by the Profit and Loss Account of the Postal Branch, was £1,877,623. Details appear hereunder :—

**CARRIAGE OF MAILS : TOTAL COST, 1941-42.**

Inland Mails.			Coastwise Mails.	Overseas Mails.		Tasmanian Subsidy.	Total.
Road.	Railway.	Air.		Sea.	Air.		
£	£	£	£	£	£	£	£
598,750	470,859	175,605	16,669	80,080	512,947	22,713	1,877,623

5. **Transactions of the Dead Letter Offices.**—The table hereunder shows the number of letters, postcards and letter-cards, and packets and circulars, including Inland, Interstate and International, dealt with by the Dead Letter Offices in 1941-42, and the methods adopted in the disposal thereof :—

**DEAD LETTER OFFICES : TRANSACTIONS, 1941-42.**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
<b>LETTERS, POSTCARDS AND LETTER-CARDS.</b>							
Returned to senders or delivered ..	No. 787,247	No. 391,535	No. 214,913	No. 119,460	No. 161,451	No. 81,144	No. 1,755,750
Destroyed in accordance with Act ..	86,848	49,241	18,849	19,394	6,066	6,885	187,283
Returned to other States or Countries as unclaimed ..	40,013	17,674	8,086	2,578	5,019	2,160	75,530
Total ..	914,108	458,450	241,848	141,432	172,536	90,189	2,018,563

**PACKETS AND CIRCULARS.**

Returned to senders or delivered ..	206,690	214,795	208,833	10,509	6,445	37,290	684,562
Destroyed in accordance with Act ..	40,051	35,589	9,552	2,743	909	4,260	93,104
Returned to other States or Countries as unclaimed ..	3,772	1,671	172	1,158	99	426	7,298
Total ..	250,513	252,055	218,557	14,410	7,453	41,976	784,964
Grand Total (letters, packets, etc.) ..	1,164,621	710,505	460,405	155,842	179,989	132,165	2,803,527

During 1941-42 money and valuables to the amount of £127,316 were found in postal articles sent to the Dead Letter Office.

6. **Money Orders and Postal Notes.**—(i) *General.* The issue of money orders and postal notes is regulated by Sections 74-79 of the Post and Telegraph Act 1901. A money order may be issued for payment of sums up to £20 within Australia, and not

exceeding £40 (in some cases £20, and in Mauritius £10) in places abroad. A postal note, which is payable only within Australia and in Papua, cannot be issued for a larger sum than twenty shillings.

(ii) *States, 1941-42.* Particulars regarding the business transactions in each State for 1941-42 are given hereunder :—

**MONEY ORDERS AND POSTAL NOTES : TRANSACTIONS, 1941-42.**

State.	Value of Money Orders Issued.	Value of Money Orders Paid.	Net Money Order Commission Received.	Value of Postal Notes Issued.	Poundage Received on Postal Notes.
	£	£	£	£	£
New South Wales ..	10,652,420	10,842,158	51,216	3,721,851	79,856
Victoria ..	4,922,904	5,228,428	22,860	2,370,790	54,721
Queensland ..	4,270,988	4,130,925	18,800	1,005,099	21,108
South Australia ..	1,563,565	1,367,722	7,074	583,467	14,148
Western Australia ..	1,955,451	1,971,931	8,838	491,968	10,686
Tasmania ..	802,319	723,719	3,731	206,357	4,663
<b>Australia ..</b>	<b>24,167,647</b>	<b>24,264,883</b>	<b>112,519</b>	<b>8,379,532</b>	<b>185,182</b>

(iii) *Australia, 1937-38 to 1941-42.* The next table shows the number and value of money orders and postal notes issued and paid in Australia from 1937-38 to 1941-42 :—

**MONEY ORDERS AND POSTAL NOTES : TRANSACTIONS, AUSTRALIA.**

Year.	Money Orders.				Postal Notes.			
	Issued.		Paid.		Issued.		Paid.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
	'000.	£'000.	'000.	£'000.	'000.	£'000.	'000.	£'000.
1937-38 ..	3,191	17,959	3,175	17,935	21,426	7,706	21,375	7,692
1938-39 ..	3,239	18,349	3,254	18,548	21,942	7,926	21,966	7,934
1939-40 ..	3,325	18,865	3,247	18,858	21,724	7,896	21,688	7,888
1940-41 ..	3,421	20,229	3,373	20,271	21,087	7,926	21,087	7,917
1941-42 ..	3,678	24,168	3,656	24,265	21,431	8,380	21,129	8,253

(iv) *Classification of Money Orders Issued and Paid.* (a) *Money Orders Issued.* The next table shows the number and value of money orders issued during 1941-42, classified according to the country where payable :—

**MONEY ORDERS ISSUED : COUNTRY WHERE PAYABLE, 1941-42.**

Where Issued.	Where Payable.				Total.
	Australia.	New Zealand.	United Kingdom.	Other Countries.	
NUMBER.					
Australia .. ..	3,620,716	10,851	32,410	14,070	3,678,047
VALUE.					
Australia .. ..	£ 24,040,286	£ 23,316	£ 62,739	£ 41,306	£ 24,167,647

(b) *Money Orders Paid.* The number and value of money orders paid during 1941-42, classified according to the country where issued, are given hereunder:—

### MONEY ORDERS PAID : COUNTRY OF ISSUE, 1941-42.

Where Paid.	Where Issued.				Total.
	Australia.	New Zealand.	United Kingdom.	Other Countries.	
NUMBER.					
Australia .. ..	3,591,056	23,089	18,193	23,231	3,655,569
VALUE.					
Australia .. ..	£ 24,033,950	£ 52,019	£ 82,218	£ 96,696	£ 24,264,883

In the tables above, money orders payable or issued in foreign countries which have been sent from or to Australia through the General Post Office in London are included in those payable or issued in the United Kingdom.

(v) *Postal Notes Paid.* The following table shows the number and value of postal notes paid in each State during 1941-42. Particulars regarding the number and value of postal notes issued and paid in each of the last five years have been given previously.

### POSTAL NOTES PAID : STATE OF ISSUE, 1941-42.

Issued in—	Postal Notes Paid in—						
	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
NUMBER.							
Same State ..	'000. 7,994	'000. 4,100	'000. 1,978	'000. 938	'000. 1,029	'000. 412	'000. 16,451
Other States ..	912	629	528	138	222	2,249	4,678
Total ..	8,906	4,729	2,506	1,076	1,251	2,661	21,129
VALUE.							
Same State ..	£'000. 3,269	£'000. 1,638	£'000. 802	£'000. 373	£'000. 411	£'000. 151	£'000. 6,644
Other States ..	358	275	186	62	52	676	1,609
Total ..	3,627	1,913	988	435	463	827	8,253

The number and value of postal notes paid in Australia during the year showed increases of 0.2 per cent. and 4.3 per cent. respectively on the corresponding figures for 1940-41.



### § 3. Telegraphs.

1. **General.**—A review of the development of the Telegraph Services in Australia appears in Official Year Book No. 15, p. 625. During the past few years substantial improvements in both the speed and grade of telegraph service throughout Australia have been effected, the entire system being subjected to intensive reorganization. Particulars of these improvements have been shown in previous issues.

2. **Telegraph Offices, Length of Lines and Wire.**—(i) *States.* The following table shows the latest figures available separately for telegraph offices and the length of telegraph lines and of telegraph wire in each State. Where separate figures as at 30th June, 1942, are not available, combined telegraph and telephone figures are shown in § 5, 1 (i) following.

TELEGRAPH OFFICES AND LINES : STATES.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of offices(a) ..	3,085	2,464	1,621	851	922	536	9,479
Length of wire (single wire mileage)—							
Telegraph purposes only	12,237	7,615	14,774	6,377	8,485	641	50,129
Telegraph and telephone purposes ..	63,223	19,121	37,072	13,057	10,071	1,448	143,992
Length of line (single wire mileage)—							
Conductors in Morse cable ..	2,792	1,417	490	..	181	24	4,904
Conductors in submarine cable ..	4,937	422	339	226	193	624	6,741
Pole routes (miles)(a) ..	33,810	19,023	14,874	14,231	12,118	3,529	97,585

(a) At 30th June, 1942. Other particulars relate to 30th June, 1940.

At 30th June, 1940, a total length of 194,121 miles of wire was available for telegraph purposes, of which 143,992 miles was also used for telephone purposes.

(ii) *Summary for Australia.* The following table gives corresponding particulars for Australia for the years 1938 to 1942 :—

TELEGRAPH OFFICES AND LINES : AUSTRALIA, AT 30th JUNE.

Particulars.	1938.	1939.	1940.	1941.	1942.
Number of offices .. ..	9,359	9,389	9,450	9,484	9,479
Length of wire (single wire mileage)—					
Telegraph purposes only ..	51,027	50,558	50,129	(a)	(a)
Telegraph and telephone purposes ..	134,974	141,360	143,992	(a)	(a)
Length of line (single wire mileage)—					
Conductors in Morse cable ..	4,813	4,816	4,904	(a)	(a)
Conductors in submarine cable ..	5,693	5,747	6,741	(a)	(a)
Pole routes (miles) .. ..	97,120	97,311	97,968	98,043	97,588

(a) Separate particulars not available.

3. Number of Telegrams Dispatched.—(i) *States.* The following table shows the number of telegrams dispatched in each State during 1941-42 according to the class of message transmitted:—

**TELEGRAMS DISPATCHED(a) : STATES, 1941-42.**

Class of Message Transmitted within Australia.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	No.	No.	No.	No.	No.	No.	No.
<b>Paid and Collect—</b>							
Ordinary ..	6,778,601	5,123,131	3,286,510	1,700,002	2,078,219	370,431	19,336,894
Urgent ..	397,641	156,044	142,080	108,404	71,882	9,906	885,957
Press ..	152,341	47,869	55,876	16,026	39,442	27,933	339,487
Lettergram ..	46,214	33,577	26,703	18,250	56,676	7,886	189,306
Radiogram ..	19,221	735	21,932	11,514	17,223	3,134	73,759
<b>Total ..</b>	<b>7,394,018</b>	<b>5,361,356</b>	<b>3,533,101</b>	<b>1,854,196</b>	<b>2,263,442</b>	<b>419,290</b>	<b>20,825,403</b>
<b>Unpaid—</b>							
Service ..	206,749	112,169	96,312	57,019	56,963	22,730	551,942
Shipping ..	..	..	..	11	..	..	11
Meteorological ..	613,201	330,441	490,549	407,128	335,546	107,900	2,284,765
<b>Total ..</b>	<b>819,950</b>	<b>442,610</b>	<b>586,861</b>	<b>464,158</b>	<b>392,509</b>	<b>130,630</b>	<b>2,836,718</b>
<b>Grand Total ..</b>	<b>8,213,968</b>	<b>5,803,966</b>	<b>4,119,962</b>	<b>2,318,354</b>	<b>2,655,951</b>	<b>549,920</b>	<b>23,662,121</b>

(a) Includes radiogram traffic with islands adjacent to Australia and to ships at sea.

(ii) *Australia.* The number of telegrams dispatched to destinations within Australia during each of the last five years is given hereunder:—

**TELEGRAMS DISPATCHED : AUSTRALIA, 1937-38 TO 1941-42.**

Telegrams.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number(a) ..	16,965,336	17,251,759	17,645,964	19,457,130	23,662,121

(a) See Note (a) above.

The increase in the volume of telegraph business has averaged 1,339,357 messages in each of the past five years.

## § 4. Oversea Cable and Radio Communication.

1. *First Cable Communication with the Old World.*—In earlier issues of the Official Year Book will be found a detailed account of the connexion of Australia with the Old World by means of submarine cables. (See No. 6, p. 770.)

2. *General Cable Service.*—Descriptions of the various cable services between Australia and other countries are given in Official Year Book No. 22, pp. 335-6.

3. *Merging of Cable and Wireless Interests.*—Following upon the recommendations of the Imperial Wireless and Cable Conference in London in 1928 which examined the situation that had arisen as the result of the competition of the Beam wireless with the cable services, the Imperial and International Communications Limited (since renamed

Cable and Wireless Ltd.) was formed and took over the operations of the Pacific Cable Board and the control of the Eastern Extension Cable Company and the Marconi Wireless Company.

4. **Oversea Cable and Radio Traffic.**—(i) *States.* The number of telegrams received from and dispatched overseas in each State during 1941-42 is given hereunder:—

#### INTERNATIONAL TELEGRAMS : STATES, 1941-42.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number received ..	574,535	361,429	64,762	60,530	68,929	15,998	1,146,183
„ dispatched	557,055	439,983	122,816	90,659	98,327	19,892	1,328,732
Total ..	1,131,590	801,412	187,578	151,189	167,256	35,890	2,474,915

(ii) *Australia.* The following table shows the number of international telegrams received from and dispatched overseas in Australia during 1940-41 and 1941-42:—

#### INTERNATIONAL TELEGRAMS.—AUSTRALIA.

Messages.	Number Received.		Number Dispatched.		Total Number Received and Dispatched.	
	1940-41.	1941-42.	1940-41.	1941-42.	1940-41.	1941-42.
Number ..	872,813	1,146,183	854,462	1,328,732	1,727,275	2,474,915

5. **Cable and Beam Wireless Rates.**—Particulars of the various types of international telegrams available for general use prior to the war, and rates applicable thereto, may be found in previous issues.

### § 5. Telephones.

1. **Telephone Services.**—(i) *Mileage in Australia.* The following table shows the mileage of lines for telephone purposes, giving trunk lines separately, at 30th June, in each of the years 1939 to 1942:—

#### TELEPHONE LINES : AUSTRALIA AT 30th JUNE.

Particulars.	1939.	1940.	1941.	1942.
<b>Ordinary Lines—</b>				
Conduits .. .. duct miles	10,817	11,919	12,973	13,828
„ .. .. route „	8,082	9,179	(a)	(a)
Conductors in aerial and underground cables .. single wire mileage	1,967,512	2,106,484	(b)	(b)
Working conductors in cables for junction circuits, not included above .. single wire mileage	205,298	217,298	2,445,466	2,584,014
Open conductors „ „ „	434,932	433,605		
<b>Trunk Lines—</b>				
Telephone trunk lines only—				
single wire mileage	220,687	219,880	(c)	(c)
Telegraph and telephone purposes—				
single wire mileage	141,360	143,992	414,092	416,941

(a) Not available.  
§ 3, 2 (i), page 147.

(b) Includes telegraph conductors in morse and submarine cables. See  
(c) Includes lines for purely telegraph purposes. See § 3, 2 (i), page 147.



(ii) *Comparison with Other Countries.* During 1941-42 the total number of telephones added to the Post office system was 18,345 compared with 29,233 in 1940-41. With an average of 97 telephones per 1,000 of population, Australia continues to hold seventh place amongst the countries of the world in respect of telephone density. The average length of wire per instrument in Australia is over  $4\frac{1}{2}$  miles. In February, 1942, restrictions were introduced on the provision of telephone facilities, unless required by the fighting services, organizations concerned actively with public defence, security or welfare, or persons engaged in the production and distribution of vital foodstuffs.

(iii) *Summary for States.* Particulars relating to the telephone service in each State for the years ended 30th June, 1940 to 1942, will be found in the following table :—

### TELEPHONE SERVICES : SUMMARY.

Particulars.	Year (30th June).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Exchanges ..	1940	2,016	1,685	1,075	584	645	357	6,362
	1941	2,018	1,686	1,079	588	635	358	6,364
	1942	2,025	1,676	1,098	591	637	356	6,383
Telephone Offices (in- cluding Exchanges)	1940	3,043	2,379	1,541	833	910	511	9,217
	1941	3,053	2,376	1,567	854	911	513	9,274
	1942	3,060	2,459	1,589	853	922	512	9,395
Lines connected ..	1940	197,010	157,081	64,120	46,767	20,903	14,695	506,612
	1941	205,097	164,051	65,920	47,962	27,367	15,150	525,547
	1942	206,103	167,909	65,224	48,747	27,649	15,443	531,075
Instruments con- nected	1940	268,216	218,128	85,817	62,788	37,227	18,882	691,088
	1941	280,161	228,930	88,722	64,821	38,116	19,565	720,321
	1942	285,243	237,484	89,773	66,839	39,156	20,171	738,666
(i) Subscribers' in- struments	1940	261,185	213,395	82,799	60,801	35,717	17,998	671,886
	1941	272,851	223,807	85,501	62,734	36,543	18,640	700,166
	1942	277,524	232,094	86,335	64,687	37,480	19,222	717,342
(ii) Public tele- phones	1940	4,303	2,620	1,831	995	935	559	11,243
	1941	4,469	2,775	1,910	1,047	882	537	11,620
	1942	4,653	2,928	1,986	1,065	916	543	12,091
(iii) Other local in- struments	1940	2,728	2,113	1,226	992	575	325	7,959
	1941	2,841	2,264	1,311	1,040	691	388	8,535
	1942	3,066	2,462	1,452	1,087	760	406	9,233
Instruments per 100 of population	1940	9.59	11.46	8.41	10.38	7.97	7.94	9.83
	1941	9.97	11.81	8.56	10.51	8.13	8.19	10.14
	1942	10.40	12.06	8.64	10.84	8.32	8.40	9.71
Earnings .. ..		£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
	1940	3,581	2,602	1,176	758	467	226	8,810
	1941	3,750	2,764	1,205	761	481	231	9,192
Working expenses ..	1942	4,130	3,102	1,346	866	532	257	10,233
	1940	2,154	1,635	713	537	367	197	5,603
	1941	2,256	1,691	802	544	377	216	5,886
	1942	2,443	1,895	915	564	415	225	6,457
Percentage of working expenses on earn- ings		%	%	%	%	%	%	%
	1940	60.15	62.86	60.65	70.90	78.63	86.91	63.61
	1941	60.17	61.19	66.52	71.45	78.43	93.38	64.03
	1942	59.15	61.08	67.93	65.18	77.99	87.78	63.10

Of the total telephones (738,666) in service on 30th June, 1942, 269,270, or 36.5 per cent. were connected to exchanges situated beyond the limits of the metropolitan telephone networks. The number of telephone offices, including exchanges, increased by 121 during the year 1941-42, bringing the total in Australia to 9,395.

(iv) *Subscribers' Lines and Calling-rates.* The next table gives the number of subscribers' lines and daily calling-rate at central, suburban and country telephone exchanges in the several States for 1941-42 :—

**TELEPHONES : SUBSCRIBERS' LINES AND DAILY CALLING-RATE, 1941-42.**

State.	Central Exchanges.		Suburban Exchanges.		Country Exchanges.		Total. (a)	
	Subscribers' Lines.	Average Outward Calls Daily per line.	Subscribers' Lines.	Average Outward Calls Daily per line.	Subscribers' Lines.	Average Outward Calls Daily per line.	Subscribers' Lines.	Average Outward Calls Daily per line.
	No.	No.	No.	No.	No.	No.	No.	No.
New South Wales ..	21,458	12.57	114,536	4.47	71,270	2.72	207,264	4.71
Victoria ..	13,493	10.14	100,579	4.04	53,837	1.83	167,909	3.82
Queensland ..	8,851	10.63	21,046	3.40	34,045	2.74	63,942	4.05
South Australia ..	6,408	9.79	22,027	3.07	18,722	1.75	47,157	3.46
Western Australia ..	7,501	7.36	9,336	3.94	9,579	2.03	26,416	4.22
Tasmania ..	3,686	4.74	2,126	2.52	8,762	2.35	14,574	2.98
Australia (a) ..	61,397	10.36	269,650	4.08	196,215	2.34	527,262	4.16

(a) Approximate figures.

A comparison of the average daily calling-rates for each class of exchange shows that New South Wales registered the greatest number of calls per line at central and suburban exchanges and Queensland at country exchanges.

For Australia the average number of calls per line at central exchanges was more than two and a half times greater than at suburban exchanges, while the average for suburban exchanges was one and three-quarter times the number shown for rural exchanges.

(v) *Effective Paid Local Calls.* The numbers of effective paid local calls from subscribers and public telephones in the various States during the years ended 30th June, 1941 and 1942 appear hereunder :—

**TELEPHONES : NUMBER OF EFFECTIVE PAID LOCAL CALLS.**

State.	Subscribers' Calls.		Calls from Public Telephones.		Total Calls.	
	1940-41.	1941-42.	1940-41.	1941-42.	1940-41.	1941-42.
	'000.	'000.	'000.	'000.	'000.	'000.
New South Wales ..	248,852	255,480	27,003	28,982	275,855	284,462
Victoria ..	180,850	186,734	13,561	15,750	194,411	202,484
Queensland ..	69,024	67,873	6,457	7,458	75,481	75,331
South Australia ..	45,790	47,510	4,605	5,714	50,395	53,224
Western Australia ..	31,452	32,446	2,052	2,535	33,504	34,981
Tasmania ..	11,870	12,655	1,033	1,211	12,903	13,866
Australia ..	587,838	602,698	54,711	61,650	642,549	664,348

(vi) *Trunk Line Calls and Revenue.* In the next table the number of telephone trunk line calls recorded, the amount of revenue received, and the average revenue per call are shown for each of the States for the years 1939-40 to 1941-42 :—

TELEPHONES : TRUNK LINE CALLS AND REVENUE.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Total Calls—	'000.	'000.	'000.	'000.	'000.	'000.	'000.
1939-40 ..	14,688	11,853	7,485	4,265	2,282	1,930	42,503
1940-41 ..	15,043	12,223	7,595	4,213	2,242	1,950	43,266
1941-42 ..	15,780	12,941	7,762	4,491	2,288	2,055	45,317
Total Revenue—	£	£	£	£	£	£	£
1939-40 ..	786,200	577,312	418,800	200,639	127,124	79,543	2,189,618
1940-41 ..	833,068	618,817	421,468	205,185	125,398	81,394	2,285,330
1941-42 ..	968,626	737,633	485,914	246,125	145,225	93,639	2,677,162
Average Revenue per Call—	d.	d.	d.	d.	d.	d.	d.
1939-40 ..	12.85	11.69	13.43	11.29	13.37	9.89	12.36
1940-41 ..	13.29	12.15	13.32	11.69	13.14	10.01	12.68
1941-42 ..	14.74	13.68	15.02	13.15	15.23	10.93	14.18

The number of trunk line calls during 1941-42 increased by more than two millions, or 4.74 per cent., compared with the figures for the previous year, whilst the average revenue per call rose by 1.5d.

2. *Revenue from Telephones.*—Particulars regarding the revenue from telephone services are included in tables in § 1.

## § 6. Radio Telegraphy and Telephony.

1. *General.*—A statement in regard to the initial steps taken to establish radio telegraphy in Australia appears in Official Year Book No. 18, p. 343.

2. *Wireless Licences.*—(i) *General.* Particulars of the various types of licences appear in previous issues.

The following table shows the number of each class of licence in force in each State and Territory as at 30th June, 1942 :—

WIRELESS LICENCES : 30th JUNE, 1942.

Station Licence.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Coast ..	1	1	6	1	5	3	1	..	18
Ship ..	73	82	16	8	11	1	..	..	181
Aircraft ..	7	9	2	4	2	..	1	..	25
Land ..	26	3	73	40	78	9	59	2	290
Broadcasting—									
National ..	6	5	6	3	5	3	..	1	29
Commercial ..	34	19	19	6	11	8	..	1	98
Broadcast Listeners' ..	498,095	371,502	172,527	136,908	91,945	46,404	336	2,356	1,320,073
Experimental ..	..	..	..	..	..	..	..	..	..
Portable ..	6	..	7	3	3	..	5	4	28
Special ..	81	65	22	14	10	4	1	1	198
Total Issued	498,329	371,686	172,678	136,987	92,060	46,432	403	2,365	1,320,940



Similar particulars to the above in relation to the year 1942-43 will be found in the Appendix to this volume.

(11) *Broadcast Listeners*'. The striking development of the use of the radio in Australia is illustrated by the following table, which gives the number of broadcast listeners' licences in force at 30th June, 1925, 1930, and for each year from 1935 to 1942 :—

NUMBER OF BROADCAST LISTENERS' LICENCES.

In force at 30th June—	N.S.W. (a)	Victoria.	Q'land. (b)	S. Aust. (c)	W. Aust.	Tas.	Australia.
1925 ..	33,719	19,243	1,061	3,118	3,417	501	61,059
1930 ..	111,080	139,887	23,263	25,671	5,715	6,032	311,648
1935 ..	278,648	236,886	67,369	76,365	41,176	20,088	720,532
1936 ..	315,731	263,414	83,028	87,335	49,987	24,118	823,613
1937 ..	358,292	288,717	101,358	99,033	61,151	29,780	938,331
1938 ..	403,978	315,406	117,496	111,787	71,324	36,013	1,056,004
1939 ..	433,029	327,579	133,217	117,307	79,262	39,392	1,129,786
1940 ..	458,155	348,158	151,110	124,891	87,764	42,182	1,212,260
1941 ..	494,884	362,790	168,216	131,292	91,368	44,716	1,293,266
1942 ..	500,451	371,502	172,527	137,244	91,945	46,404	1,320,073

(a) Includes Australian Capital Territory.

(b) Includes Papua.

(c) Includes Northern Territory.

3. *Broadcasting*.—(i) *The National Broadcasting Service*. The technical services for the National Service are provided by the Postmaster-General's Department, and the programme by the Australian Broadcasting Commission, a body consisting of five members, constituted under the provisions of the Australian Broadcasting Commission Act. The fee for a broadcast listener's licence is 20s. per annum for a receiver situated approximately within 250 miles from a station of the National Service, and 14s. per annum in the area beyond. Licences are issued free to blind persons. In September, 1940, the Commission's proportion of the licence fee was reduced from 12s. to 10s. In July, 1942, it was increased to 11s., and representations have been made for the restoration of the other 1s.

The National Broadcasting System of Australia at 30th June, 1942, comprised 29 transmitting stations— as follows :—

*Medium-wave Stations—*

2FC and 2BL Sydney.	4RK Rockhampton.
2NC Newcastle.	4QS Dalby.
2CO Corowa.	4 AT Atherton.
2NR Lawrence.	5CL and 5AN Adelaide.
2CR Cumnock	5CK Crystal Brook.
2CY Canberra.	6WF and 6WN Perth.
3LO and 3AR Melbourne.	6WA Minding.
3GI Sale.	6GF Kalgoorlie.
3WV Dooen.	7ZL and 7ZR Hobart.
4QG and 4QR Brisbane.	7NT Kelso.
4QN Townsville.	

*Short-wave Stations—*

VLG and VLR Lyndhurst, Victoria.	VLW Perth, Western Australia.
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(ii) *Commercial Broadcasting Stations*. The services of other broadcasting stations are conducted by private enterprise under licence from the Postmaster-General. Licences are granted on conditions which ensure satisfactory alternative programmes for listeners. The fee for a broadcasting station licence is £25 and the maximum period of a licence is three years, although they may be renewed annually at the discretion of the Postmaster-General. Licensees of these stations do not share in the listeners' licence fees, but rely for their income on revenue received from the broadcasting of advertisements and other publicity. The number of these stations in operation at 30th June, 1942, was 98.

4. Overseas Communication by Wireless.—(i) *Beam Wireless*. The Beam Wireless stations provided for under the agreement between the Commonwealth Government and Amalgamated Wireless Australasia) Ltd. were completed early in 1927, and a direct beam wireless service to England was established on 8th April, 1927. A similar service to North America was opened on 16th June, 1928. Particulars of international traffic via "Beam" are given in par. (iii) (a) following.

(ii) *Wireless Communication in the Pacific*. Prior to the outbreak of war with Japan, New Zealand, the territories of New Guinea and Papua and the various small islands in the Pacific Ocean were served by a comprehensive system of wireless communication. Particulars of the island traffic for the year 1941-42 appear in par. (iii) (b) and (c) following.

(iii) *Radiotelegraphic Traffic*. (a) *International*. The following statement shows particulars of international traffic "via Beam" to and from United Kingdom and other places during the year ended 30th June, 1942:—

#### RADIO TRAFFIC : INTERNATIONAL, 1941-42.

Class of Traffic.	Number of Words Transmitted to—			Number of Words Received from—		
	United Kingdom.	Other Places.	Total.	United Kingdom.	Other Places.	Total.
Ordinary (a) ..	540,474	335,879	876,353	487,427	245,238	732,665
Deferred ordinary ..	1,808,502	1,193,225	3,001,727	1,885,622	637,874	2,523,496
Government (a) ..	89,159	122,607	211,766	141,399	447,593	588,992
Press (including deferred press) ..	1,473,090	1,090,199	2,563,289	5,247,409	1,801,247	7,048,656
Daily letter and greeting telegrams ..	2,641,205	3,366,293	6,007,498	2,977,695	1,293,617	4,271,312
E.F.M.(b) ..	130,954	32,263	163,217	103,448	35,098	138,546
Total ..	6,683,384	5,140,466	12,823,850	10,843,000	4,460,667	15,303,667

(a) Includes code telegrams. (b) Special telegrams, usually in standard phrases, for transmission to and from members of the Defence Services abroad.

(b) *Coast Stations*. Particulars of the traffic handled by the several coast stations during 1941-42 are as follows:—

#### RADIO TRAFFIC : COAST STATIONS, 1941-42.

State or Territory.	Particulars.				
	Total Paying Words.	Messages.			
		Paying.	Service.	Weather.	Total.
	No.	No.	No.	No.	No.
New South Wales ..	2,284,026	51,338	8,039	9,590	68,967
Victoria ..	104,994	2,400	929	1,066	4,395
Queensland ..	190,721	6,519	5,244	8,016	19,779
South Australia ..	1,406	47	138	..	185
Western Australia ..	25,170	1,124	12,919	748	14,791
Tasmania ..	105,303	6,548	1,307	2,068	9,923
Northern Territory ..	64,455	2,902	3,820	5,316	12,038
Australia ..	2,776,075	70,878	32,396	26,804	130,078
Papua ..	1,920,472	46,335	2,241	16,412	64,988
Grand Total ..	4,696,547	117,213	34,637	43,216	195,066

(c) *Island Stations.* Particulars of the island radio traffic dealt with during 1941-42 are given in the following table:—

RADIO TRAFFIC : ISLAND STATIONS, 1941-42.

Particulars.			To Australia.	From Australia.	Inter- Island.	Ship.	Total.
			No.	No.	No.	No.	No.
Messages	..	..	5,913	5,841	13,376	3	25,133
Words	..	..	167,815	226,089	210,425	57	604,386



## CHAPTER VI. EDUCATION.

### § 1. Evolution of Educational Systems in Australia.

1. **Educational Systems of the States.**—As the first settlement in Australia was in New South Wales, it was but natural that Australian education should have had its beginning in that State, and consequently the mother State has played a leading part in the evolution of educational method and system in Australia. The subject is dealt with in some detail in the first two issues of the Official Year Book, which also contain a more or less detailed account of the origin and development of the educational systems of the other States.

2. **Later Development in State Educational Systems.**—Issues of the Official Year Book up to No. 22 contain an outline of later developments of the educational systems of the various States. The educational systems of the States may now be considered as more or less homogeneous entities, the various stages succeeding one another by logical gradation from kindergarten to university.

3. **School Age.**—The statutory school age for children in each State, set out briefly, is as follows:—New South Wales, 6 to 15 years; Victoria, 6 to 14 years; Queensland, 6 to 14 years; South Australia, 6 to 14 years; Western Australia, 6 to 14 years; and Tasmania, 7 to 14 years. In December, 1939, the statutory period was extended in New South Wales to include children at age 6 years. It was extended further by four months in each year 1941 to 1943.

It is provided in some States that in cases where any child is living outside stated distances from a State school, the age at which the child must commence school is increased. Provision is also made that a scholar having attained a certain standard may leave school before reaching the statutory leaving age.

At the 1936 Conference of Directors of Education a resolution was passed urging the necessity of raising the compulsory school leaving age to 15 years. This resolution was submitted to a conference in Sydney of Ministers of Education who agreed to recommend to their respective Governments legislation to implement the proposal by the year 1940 but owing to war conditions their operation has been postponed. The necessary legislation has been passed in some States.

4. **Australian Council for Educational Research.**—This Council was constituted on 10th February, 1930, as the result of an endowment from the Carnegie Corporation of New York. The endowment terminated in December, 1942, by which time the total value in Australian currency of the annual payments had amounted to £120,000. Australian support so far received consists of a grant of £250 from the Western Australian Government in 1940, a grant of £1,000 from the Commonwealth Department of Labour and National Service in 1942, and a grant of £2,500 from the Commonwealth Treasury in 1943.

The Council consists of nine members of whom six are elected by State Institutes for Educational Research established in each of the Australian States. The functions of the Council are to conduct surveys and inquiries in the educational field, to make grants to approved investigators, to act as a centre of information on educational developments both within Australia and overseas, to provide services of a technical character such as those connected with the assessment of knowledge and aptitude, and to provide training for research workers. In general, through the publication of reports and in other ways, the Council aims at improving the standards of education and at stimulating thought about educational problems. So far 77 reports have been published, the latest being a comprehensive survey of the training of teachers in Australia. The Council is at present producing a series of about sixteen pamphlets on educational reconstruction under the general title "The Future of Education".

The Council is autonomous, but maintains close contact with educational authorities, with the Universities and with other educational bodies. Its present investigations include a comparative survey into the courses of study and examinations for children between twelve and sixteen years made at the request of the State Education Departments, and a study of the prediction of success of University students.

During the past two years the Council has been called upon for advice and service by the following departments of the Commonwealth Government :—Labour and National Service, Man Power, Post-War Reconstruction, Home Security, War Organization of Industry and Department of the Army. The services have included such matters as the preparation of pamphlets, advice on psychological and educational matters, the preparation of tests to determine the suitability of individuals for training as fitters and turners, etc. The Council prepared the psychological tests which are used in determining the acceptance and placement of army recruits.

The head-quarters of the Council are at 147 Collins-street, Melbourne, C.I., Victoria.

## § 2. Census Records.

1. **Persons Receiving Instruction.**—The Census and Statistics Act 1905-1938 specifies "Education" as a subject for inquiry at a Census, but does not indicate the nature or range of the information to be furnished. At earlier Censuses an inquiry regarding the degree of education was restricted to a question as to ability to read and write, but under the system of compulsory education the number of persons in Australia who reach maturity without being able to read and write is very small, and this question was omitted at the 1933 Census. The only question asked concerning those receiving instruction at the time of the 1933 Census was to state the nature of the school they were attending. The tabulation of these details for each of the last three Censuses resulted as follows :—

### PERSONS RECEIVING INSTRUCTION AT THE DATE OF THE CENSUS, 1911 TO 1933.

Receiving Instruction at—	Number.			Percentage.		
	1911.	1921.	1933.	1911.	1921.	1933.
				%	%	%
Government School ..	593,059	791,724	904,383	76.49	77.36	77.23
Private School ..	156,106	193,774	224,994	20.13	18.93	19.21
University ..	2,465	7,252	8,525	0.32	0.71	0.73
Home ..	23,760	30,712	33,126	3.06	3.00	2.83
Total ..	775,390	1,023,462	1,171,028	100.00	100.00	100.00

2. **Ages of Scholars.**—In the next table the number of scholars at specified ages in 1933 are shown together with the total number of persons recorded for those ages :—

### SCHOOLING OF AUSTRALIAN POPULATION (SEXES COMBINED), 30th JUNE, 1933.

Age Last Birthday. Years.	Number Receiving Instruction at—				Number not stated and not at School.	Total.
	Government School.	Private School.	Home.	University.		
4 .. ..	6,287	3,528	2,916	..	(a) 556,234	(a) 568,965
5 .. ..	49,051	12,037	3,475	..	60,348	124,911
6 .. ..	83,816	18,269	3,169	..	17,385	122,639
7 .. ..	95,811	20,172	3,091	..	7,221	126,295
8 .. ..	98,769	20,642	2,809	..	5,798	128,018
9 .. ..	97,616	20,414	2,467	..	5,020	125,517
10 .. ..	100,676	21,264	2,309	..	5,189	129,438
11 .. ..	101,047	21,318	2,190	..	4,939	129,494
12 .. ..	102,087	21,712	2,108	..	5,224	131,131
13 .. ..	88,375	20,392	2,114	..	9,127	120,008
14 .. ..	40,868	15,643	1,804	..	56,836	115,151
15 .. ..	20,149	12,261	1,347	..	86,197	119,954
16 .. ..	9,784	8,361	869	101	103,265	122,380
17 .. ..	4,799	4,521	611	494	110,208	120,633
18 .. ..	2,480	2,087	565	1,224	120,434	126,790
19 .. ..	1,257	893	403	1,463	121,637	125,653
20 and over ..	1,511	1,480	879	5,243	4,183,749	4,192,862
Total ..	904,383	224,994	33,126	8,525	5,458,811	6,629,839

(a) Includes those aged under 3 years.

3. **Percentage of Persons not Receiving Instruction.**—The compulsory school age in the various States ranged from 6 to 14 years. From the foregoing table it will be seen that the proportion of children aged last birthday from 6 to 13 years receiving instruction was 94.1 per cent. Conversely 5.9 per cent. of the children within the compulsory range were not indicated as receiving instruction at the date of the Census. The corresponding ratio in 1921 was 6.7 per cent.

As the minimum compulsory school age in New South Wales and Tasmania at the date of the Census was 7 years, and as exemptions from further attendance for special reasons on attaining age 13 obtain throughout the States, a more reliable estimate of the percentage of children not receiving instruction may be obtained by ignoring the extreme ages of the compulsory range. The elimination of these ages reduces the percentage from 5.9 to 4.3 per cent. Attendance at school was known to be affected by the severe economic conditions prevailing at the time of the Census, and this latter figure was consequently in excess of the corresponding percentage of 3.7 in 1921. The effect of accessibility to schools may be seen in the further reduction of the percentages of these ages not receiving instruction in the metropolitan areas to 3.5 in 1933 and to 2.9 in 1921.

4. **Religions of Scholars.**—The following table shows the class of school at which the young adherents to the principal religious denominations were being educated at the date of the Census :—

**ADHERENTS RECEIVING INSTRUCTION AT DIFFERENT KINDS OF SCHOOLS,  
30th JUNE, 1933.**

Denomination.	Government School.	Private School.	University.	Home.	Total Specified.
Baptist .. ..	17,473	998	166	304	18,941
Catholic, Roman(a) ..	84,763	146,197	1,339	6,263	238,562
Church of Christ .. ..	10,822	479	86	214	11,601
Church of England .. ..	397,717	37,442	3,263	14,612	453,034
Congregational .. ..	9,274	1,112	202	224	10,812
Lutheran .. ..	8,257	910	45	217	9,429
Methodist .. ..	116,365	5,926	1,023	2,723	126,037
Presbyterian .. ..	108,870	9,836	1,302	3,814	123,822
No Reply .. ..	119,130	18,415	646	3,805	141,996
Other .. ..	31,712	3,679	453	950	36,794
<b>Total .. ..</b>	<b>904,383</b>	<b>224,994</b>	<b>8,525</b>	<b>33,126</b>	<b>1,171,028</b>

(a) Including Catholic, Undefined.

The most prominent feature of the results given above is the relatively small proportion of Roman Catholics attending State schools. Of the Roman Catholics reported as receiving instruction, 34.66 per cent. were attending State schools compared with 86.84 per cent. for the rest of the community, the proportion for the whole being 77.23 per cent.

### § 3. State Schools.

1. **General.**—The State Schools, or, as they are sometimes termed, the “public” schools, of Australia comprise all schools directly under State control, in contradistinction to the so-called “private” schools, the bulk of which, though privately managed, nevertheless cater for all classes of the community. Separate information regarding technical education is given in § 8, but the junior technical schools are included hereunder. The returns include figures relating to correspondence schools as well as subsidized schools, but evening schools and continuation classes, where such are in existence, are not included, but are dealt with separately in par. 3 (iv) following.



2. Returns for Year 1941.—(i) *General.* The following table shows the number of State Schools, together with the teachers employed and the number of individual children in attendance during 1941 :—

## STATE SCHOOLS, 1941.

State or Territory.	Schools.	Teachers Employed.	Teachers in Training.	Net Enrolment.
New South Wales(a) .. .. .	3,053	12,047	1,210	359,694
Victoria .. .. .	2,640	8,868	456	225,023
Queensland .. .. .	1,660	4,401	314	138,358
South Australia .. .. .	989	3,078	248	72,156
Western Australia .. .. .	762	2,378	142	(b) 57,490
Tasmania .. .. .	424	1,273	117	33,354
Northern Territory(c) .. .. .	7	21	..	580
Australia .. .. .	9,535	32,066	2,487	886,655

(a) Includes Australian Capital Territory.  
30th June, 1942.

(b) Average weekly enrolment.

(c) Year ended

(ii) *Average Enrolment and Attendance.* The methods of calculating enrolment are not identical throughout the States. The unit in South Australia is the daily enrolment while New South Wales, Victoria, Western Australia and Tasmania employ the weekly enrolment. In Queensland no average enrolment is compiled, and the mean of the four quarterly gross enrolments is the only figure available.

As with enrolments there is not complete uniformity in arriving at the average attendance, but most of the States aggregate the attendances for the year and divide by the number of school sessions. New South Wales and Western Australia, however, employ averages of term averages. The matter of securing uniformity in these respects has been under consideration for some time, and the Council for Educational Research, already referred to in § 1, par. 4, is devoting attention to the question of securing greater uniformity in methods of collection and presentation of educational data generally. The average enrolment and attendance in each State during 1941 are shown below :—

## STATE SCHOOLS : AVERAGE ENROLMENT AND ATTENDANCE, 1941.

State or Territory.	Average Weekly Enrolment.	Average Daily Attendance.	Percentage of Attendance on Enrolment.
New South Wales .. .. .	333,024	291,191	% 87.42
Victoria .. .. .	211,880	187,316	88.42
Queensland .. .. .	134,452	110,839	82.44
South Australia .. .. .	68,504	62,051	90.58
Western Australia .. .. .	57,490	52,790	91.82
Tasmania .. .. .	31,196	27,457	88.01
Northern Territory(a) .. .. .	550	472	85.82
Australia .. .. .	837,096	732,116	87.46

(a) Year ended 30th June, 1942.

The percentage of attendance on enrolment is lowest in Queensland, but this figure is not comparable with those of the other States, as no average enrolment is available for Queensland.

Extraordinary epidemics apart, it would appear from the steadiness of the returns in recent years that the percentage of attendance on enrolment is approaching its maximum under present conditions in Australia. Recurring epidemics of contagious diseases, minor illnesses, bad weather and long distances are all serious factors limiting the full attendance of pupils at school.

The average attendance at the State Schools in Australia is shown below for the year 1891 and at varying intervals to 1941 :—

STATE SCHOOLS : AVERAGE ATTENDANCE, AUSTRALIA.

Year.			Total Population. (a)	Average Attendance.	Year.			Total Population. (a)	Average Attendance
1891	..	..	3,421	350,773	1936	..	..	6,807	792,148
1901	..	..	3,825	450,246	1937	..	..	6,867	761,848
1911	..	..	4,574	463,799	1938	..	..	6,930	757,669
1921	..	..	5,511	666,498	1939	..	..	6,997	744,095
1931	..	..	6,553	817,262	1940	..	..	7,069	741,496
1933	..	..	6,657	805,334	1941	..	..	7,137	732,116

(a) At 31st December, in thousands.

It is possible, for Census years, to relate with reasonable accuracy the average attendance of scholars at State Schools to the number of children who are approximately of school age. For this purpose the ages 5 to 15 years, both included, have been taken and the average attendance per thousand children was :—1891, 455; 1901, 464; 1911, 477; 1921, 544; and 1933, 585. Although other factors might have affected the results in a minor degree it would appear that considerable improvement has taken place in school attendance during the last twenty years.

(iii) *Schools in the Australian Capital Territory.* During 1941 thirteen State Schools were in operation in the Australian Capital Territory. The individual pupils enrolled numbered 1,743 and the average attendance 1,541. Cost of upkeep amounted to £32,320. By arrangement with the Commonwealth Government these schools are conducted by the New South Wales Education Department in the same way as the ordinary State Schools, the Department being recouped for expenditure. Ample provision has been made for both primary and secondary education, and this will be increased to meet requirements. The figures quoted, other than expenditure, do not include enrolment, etc., at the Trade School and the Evening Continuation School. A reference to the Canberra University College will be found in § 6, par. 9.

3. Distribution of Educational Facilities.—(i) *In Sparsely-settled Districts.*—

(a) *General.* The methods adopted in the various States to carry the benefits of education into the remotest and most sparsely-settled areas are set out in some detail in previous issues of the Official Year Book (see No. 22, pp. 430-1).

(b) *Correspondence Teaching.* Teaching by correspondence has been adopted to meet the needs of children out of reach of the ordinary means of education, including those prevented from attending school through physical ailment. Approximately 17,600 children received instruction in this way during 1941, the respective numbers in each State being: New South Wales, 6,605; Victoria, 897; Queensland, 5,518; South Australia, 1,908; Western Australia, 2,185; and Tasmania, 488.

(ii) *Centralization of Schools.* The question of centralization of schools adopted so successfully in America and Canada has received considerable attention in Australia. It is recognized that a single adequately staffed and well equipped central institution can give more efficient teaching than a number of small scattered schools in the hands of less highly trained teachers, and the small schools in some districts were therefore closed and the children conveyed to the central institution. The principle was first adopted in New South Wales in 1904, and in 1941 a sum of £22,446 was expended in boarding allowances and conveyance to central schools. Cost of conveyance to State Schools in Victoria during 1941-42 amounted to £22,722. In Queensland during 1941-42 the cost of transport by rail, road and boat, amounted to £25,258. In South Australia the sum of £12,300 was disbursed in travelling expenses of school children in 1942, while £21,077 was spent in Western Australia during 1940-41, £28,913 in Tasmania in 1941, and £2,916 in the Australian Capital Territory in 1941-42.

(iii) *Education of Backward and Defective Children.* This subject was referred to at some length in preceding issues of the Official Year Book (see No. 22, pp. 431-2.)

(iv) *Evening Schools.* Evening Continuation Schools have been in existence for many years in some of the States, but their progress has been uncertain. The aim of these schools is to provide a means of furthering the education of those who have left school at the termination of the primary course. Practical and cultural subjects are combined in the curriculum to be of assistance to those attending in their occupations and their civic life. In New South Wales the 29 Evening Continuation Schools had an average weekly enrolment in 1941 of 2,763 and an average attendance of 2,061. The schools are divided into three groups, junior technical, domestic science, and commercial. Attendances at the schools for boys numbered 1,689, and at those for girls 372. Unemployed pupils receive free tuition, and all fees are refunded to others with a satisfactory record of attendance. In Western Australia evening continuation classes were held at 23 centres in 1930, with an average enrolment of 2,777 pupils, but the classes were discontinued at the end of that year and preparatory technical classes were substituted wherever there was a technical school in operation.

(v) *Higher State Schools.* In all the States higher schools have been established which provide advanced courses of instruction for pupils who have completed the primary grades. Reference to the development of these schools will be found in preceding Official Year Books (see No. 22, pp. 433-4).

(vi) *Agricultural Training in State Schools.* Extended reference to the methods adopted in the teaching of agriculture in State Schools was incorporated in preceding Official Year Books (see No. 22, pp. 434-7).

4. *Training Colleges.*—The development of the training systems of the various States is referred to at some length in earlier issues of the Official Year Book (see No. 22, pp. 437-9).

5. *Expenditure.*—(i) *Maintenance—All Schools.* The net expenditure on maintenance in all grades of schools, excepting senior technical schools and in Victoria and Tasmania junior technical schools, and the cost per head of average attendance for the five years ended 1941 are shown in the following table. The figures do not include expenditure on buildings, which is given separately in a subsequent table. In all expenditure tables the figures for Victoria and Western Australia and for Queensland the last four years relate to the financial year ended six months later than the stated calendar year.

#### STATE SCHOOLS : EXPENDITURE ON MAINTENANCE.

Year.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Terr.	Total.
TOTAL (INCLUDING SECONDARY SCHOOLS).								
	£	£	£	£	£	£	£	£
1937	3,994,646	2,602,114	1,337,120	786,942	695,584	298,246	6,307	9,720,959
1938	4,525,546	2,621,297	1,458,366	821,935	712,012	307,543	6,307	10,453,006
1939	4,598,376	2,667,094	1,481,799	854,037	730,500	320,616	6,802	10,658,824
1940	4,673,143	2,635,641	1,477,743	886,828	732,802	324,972	7,551	10,738,680
1941	4,897,223	2,659,924	1,487,293	881,117	773,680	433,034	8,827	11,051,098
PER HEAD OF AVERAGE ATTENDANCE.								
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1937	13 0 1	14 16 6	11 11 11	10 16 5	12 16 5	10 6 2	12 19 0	12 17 9
1938	15 0 11	14 6 11	12 6 2	11 15 11	13 2 4	11 0 8	13 14 3	13 18 11
1939	15 12 2	14 1 4	13 0 9	12 18 4	14 5 7	11 7 6	11 3 9	14 6 7
1940	15 14 9	14 1 9	13 2 0	13 13 1	14 1 11	11 19 7	12 8 5	14 9 8
1941	16 16 4	14 4 0	13 8 5	14 4 0	14 13 1	12 9 10	18 14 0	15 1 11

(a) Gross figures, receipts not being available.



(ii) *Maintenance—Secondary Schools.* The figures given in the preceding table refer to expenditure on maintenance of all State primary and secondary schools, excluding technical colleges. It has been thought desirable by the State Education Departments to give separate information in regard to the cost of secondary education. The difficulty of making any satisfactory allocation of the kind, however, will be understood when it is realized that both elementary and higher education are in some instances given in the same school and by the same teacher. Unfortunately, too, the term “secondary” has not the same meaning in all States. It might be mentioned here that similar difficulties arise in connexion with the apportionment amongst the various branches of expenditure on administration, inspection and the training of teachers. The figures quoted in regard to cost hereunder have been extracted from the Reports of the State Education Departments, and are subject to the qualifications enumerated above.

### STATE SECONDARY SCHOOLS : EXPENDITURE ON MAINTENANCE, 1941.

State.						Cost.	Cost Per Head of Population.
						£	s. d.
New South Wales	..	..	..	..	..	910,716	6 6
Victoria	..	..	..	..	..	505,234	5 2
Queensland	..	..	..	..	..	178,147	3 5
South Australia	..	..	..	..	..	154,053	5 2
Western Australia	..	..	..	..	..	(a) 168,120	7 2
Tasmania	..	..	..	..	..	39,552	3 4

(a) Year 1940-41.

The figures in all cases exclude the cost of buildings. In the case of Victoria the total includes the expenditure on “intermediate” education amounting (excluding administration costs) to £130,520. For Queensland, the figure quoted excludes the cost of the Agricultural High School and College, which amounted in 1941 to £27,370. For Western Australia the total for 1940-41 includes £97,000 on account of “post-primary” education.

(iii) *Buildings.* Expenditure on school buildings, excluding Technical Colleges, in each of the years quoted was as follows :—

### STATE SCHOOLS : EXPENDITURE ON BUILDINGS.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Terr.	Total.
	£	£	£	£	£	£	£	£
1937	467,920	163,532	325,865	76,775	44,344	62,117	786	1,141,339
1938	479,703	170,061	208,750	94,584	72,658	70,962	786	1,097,504
1939	411,720	206,481	174,725	85,539	56,994	60,011	539	996,009
1940	270,840	212,110	157,241	75,948	43,686	69,067	..	828,892
1941	208,855	165,568	67,406	58,541	30,987	50,907	..	662,264

The totals for the various States in 1941 include the following amounts expended from loan and unemployment relief funds :—New South Wales, £217,178 ; Victoria, £82,346 ; Queensland, £38,964 ; South Australia, £17,099 ; Western Australia, £19,603 ; and Tasmania, £40,496.

(iv) *Total.* The net total cost during 1941 was as follows:—

**STATE SCHOOLS : NET TOTAL COST, 1941.**

Item.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Terr.	Total.
Net cost of education, including buildings ..	£ 5,186,078	£ 2,825,492	£ 1,554,699	£ 939,658	£ 804,667	£ 393,941	£ 8,827	£ 11,713,362

The figures in this and the preceding tables refer to all grades of State Schools (with the exception of senior technical schools and in Victoria and Tasmania junior technical schools). Including buildings, the net cost per scholar in average attendance for the whole of the State Schools in Australia amounted in 1941 to £16 os. od., as compared with £4 9s. 3d. in 1901.

6. *School Banking.*—With the object of inculcating principles of thrift amongst the children, agencies of the Savings Banks have been established at many of the schools throughout Australia. Particulars for each State and Territory at 30th June, 1943, were as follows:—

**SCHOOL SAVINGS BANKS AT 30th JUNE, 1943.**

State or Territory.	Agencies.		Depositors.		Amount on Deposit.	Average per Depositor.	
	No.	No.	No.	No.	£	£	s. d.
New South Wales .. ..	2,746	154,946	305,761	1 19	6		
Victoria .. ..	2,784	145,291	295,710	2 0	8		
Queensland .. ..	1,414	56,912	171,855	3 0	5		
South Australia .. ..	1,015	70,593	173,271	2 9	1		
Western Australia .. ..	616	34,707	117,752	3 7	10		
Tasmania .. ..	469	31,532	49,424	1 11	4		
Northern Territory .. ..	6	293	1,059	3 12	3		
Australian Capital Territory ..	12	1,058	1,869	1 15	4		
Australia .. ..	9,062	495,332	1,116,701	2 5	1		

**§ 4. Private Schools.\***

1. *Returns for 1941.*—The following table shows the number of private schools, together with the teachers engaged therein, and the enrolment and average attendance in 1941:—

**PRIVATE SCHOOLS, 1941.**

State or Territory.				Schools.	Teachers.	Enrolment.	Average Attendance.
New South Wales .. ..	..	..	..	739	5,213	103,350	86,629
Victoria .. ..	..	..	..	518	2,744	81,308	(a) 76,305
Queensland .. ..	..	..	..	225	1,561	35,613	29,461
South Australia .. ..	..	..	..	157	831	13,502	12,002
Western Australia .. ..	..	..	..	159	688	15,688	14,431
Tasmania .. ..	..	..	..	63	329	6,886	5,320
Northern Territory(b)	..	..	..	2	(c) 3	(c) 233	(c) 207
Total .. ..	..	..	..	1,863	11,369	256,580	224,355

(a) Net attendance.

(b) Year ended 30th June, 1942.

(c) Incomplete.

The Roman Catholic schools comprise the largest group of private schools in Australia. On the basis of the figures available, approximately 200,000 children, or 80 per cent. of the total in private schools, are educated in Roman Catholic schools.

\* Private schools include all schools not wholly under State control. The term "private" though popularly applied, is, of course, a misnomer.

The figures for Queensland include the returns from Grammar schools, of which there are eight—five for boys and three for girls, with an enrolment of 1,346 boys and 714 girls. These schools are governed by boards of trustees, partly nominated by the Government, and partly by the subscribers to the funds. The trustees make regulations regarding the fees of scholars, the salaries of teachers, and generally for the management of the schools. The Government endowment received in 1941 amounted to £13,500. In addition, a sum of £14,797 was received by way of fees for the tuition of State scholarship holders. The Grammar schools are inspected annually by officers of the Department of Public Instruction.

2. Growth of Private Schools.—The enrolment and average attendance at private schools in 1891 and at varying intervals to 1941 were as follows:—

#### PRIVATE SCHOOLS: ENROLMENT AND ATTENDANCE.

Year.	Enrolment.	Average Attendance.	Year.	Enrolment.	Average Attendance.
1891 .. ..	124,485	99,588	1937 .. ..	235,815	210,101
1901 .. ..	148,659	120,742	1938 .. ..	249,497	218,510
1911 .. ..	160,794	132,588	1939 .. ..	250,860	219,171
1921 .. ..	198,688	164,073	1940 .. ..	252,767	221,317
1931 .. ..	221,387	189,665	1941 .. ..	256,580	224,355

3. Registration of Private Schools.—Conditions in regard to the registration of private schools were referred to in previous Official Year Books (see No. 18, p. 451).

### § 5. Free Kindergartens.

The following information regarding Free Kindergartens has been compiled from particulars supplied by the principals of the chief institutions or the organizing secretary in each State, except in the case of Western Australia where the details were furnished by the Education Department:—

#### FREE KINDERGARTENS, 1942.

State.	No. of Schools.	Average Attendance.	Permanent Instructors.	Student Teachers.	Voluntary Assistants.
New South Wales .. ..	19	711	42	61	48
Victoria .. ..	33	1,479	70	76	137
Queensland (a) .. ..	6	380	8	20	6
South Australia .. ..	11	425	27	23	15
Western Australia .. ..	7	176	11	7	6
Tasmania .. ..	6	517	11	..	9
Total .. ..	82	3,688	169	187	221

(a) Year 1941.

In Queensland the kindergartens did not open in 1942 and in some other States did not function fully owing to the war conditions.

The kindergartens in the foregoing table are all in the metropolitan areas of the various States, with the exception of three country centres, two at Geelong and one at Ballarat, which are included in the Victorian return and two centres at Launceston and one at Ulverstone are included in the Tasmanian return. In each capital city there is a training college and the number of students in training during 1942 was 80 in Sydney, 60 in Melbourne, 20 in Brisbane, 23 in Adelaide, and one in Perth.

The information given above refers to private kindergarten unions or associations, and excludes the kindergarten branches in the Government schools of the various States.



## § 6. Universities.

1. **Origin and Development.**—A brief account of the origin and development of the Universities in the various States is given in preceding issues of the Official Year Book (see No, 22, pp. 442-3).

The statistical officers of the Australian Universities met in conference at Melbourne in August, 1939, and designed forms for the collection of university statistics which were subsequently approved by the Vice-chancellors' committee, and were amended at a meeting held at Sydney in 1943.

2. **Teaching Staff.**—The following table shows the number of professors, lecturers in charge, lecturers, demonstrators, tutors, etc., on the teaching staffs of the Universities during 1942 :—

UNIVERSITIES : TEACHING STAFF, 1942.

University.	Professors, Lecturers in Charge.	Lecturers, Assistant Lecturers.	Demon- strators, and Tutors.	Others.	Total.
	No.	No.	No.	No.	No.
Sydney .. .. .	55	232	23	100	410
Melbourne .. ..	38	211	104	2	355
Queensland (Brisbane) ..	25	160	51	28	264
Adelaide .. .. .	29	117	77	4	227
Western Australia (Perth) ..	16	46	6	3	71
Tasmania (Hobart) .. ..	13	26	3	..	42
New England University College .. .. .	..	17	8	9	34
Canberra University College	..	6	1	..	7
	176	815	273	146	1,410

The Conservatorium in Sydney is attached to the Education Department, and is not under the control of the University.

3. **Students.**—The number of students enrolled for courses at the Universities during 1942 is shown in the following table :—

UNIVERSITIES : STUDENTS ENROLLED, 1942.

University.	Degree Courses.	Diploma Courses.		Certificate Courses.	Mis- cellaneous.	Total.
		Post- Graduate.	Sub- Graduate.			
	No.	No.	No.	No.	No.	No.
Sydney .. .. .	2,737	55	148	..	170	3,110
Melbourne (a) .. ..	2,773	6	178	20	203	3,180
Queensland (Brisbane) ..	1,075	15	90	44	81	1,305
Adelaide .. .. .	1,136	56	184	..	627	2,003
Western Australia (Perth)	480	14	2	..	108	604
Tasmania (Hobart) .. ..	244	..	12	..	97	353
New England University College .. .. .	120	23	..	..	..	143
Canberra University College	31	..	23	..	9	63
Total .. .. .	8,596	169	637	64	1,295	10,761

(a) Excludes 20 students enrolled but attending Canberra University College.

Of the total students 7,025 were males and 3,736 females. Included in those enrolled for degrees, 27 in Melbourne, 24 in Adelaide, 13 in Western Australia and 1 in Tasmania were enrolled for higher degree courses.

4. *University Receipts.*—The receipts of the Universities are derived principally from Government grants, students' fees, and income from private foundations. The receipts for the general University functions from all sources other than new bequests during 1942 are shown in the table below. In South Australia Government grants and income from private foundations include amounts in respect of the Waite Agricultural Research Institute.

UNIVERSITIES : RECEIPTS, GENERAL ACTIVITIES, 1942.

University.	Government Grants.	Students' Fees.	Interest, Rent Dividends and Donations.	Other.	Total.
	£	£	£	£	£
Sydney .. .. .	124,415	88,035	57,613	1,833	271,896
Melbourne .. .. .	103,200	64,396	20,659	17,322	205,577
Queensland (Brisbane) ..	50,000	23,114	16,349	7,650	97,113
Adelaide .. .. .	69,762	29,395	21,469	5,934	126,560
Western Australia (Perth) ..	31,725	2,572	3,742	3,759	41,798
Tasmania (Hobart) ..	14,525	2,698	685	2,053	19,961
New England University College .. .. .	18,083	1,103	485	7,450	27,121
Canberra University College	3,490	421	39	85	4,035
<b>Total .. .. .</b>	<b>415,200</b>	<b>211,734</b>	<b>121,041</b>	<b>46,086</b>	<b>794,061</b>

The figures in the foregoing table do not include the value of new foundations received during 1942, which amounted to £12,727 in New South Wales, £79,578 in Victoria, £450 in Queensland and £11,635 in South Australia.

5. *University Benefactions.*—In preceding issues of the Official Year Book information is given in some detail in regard to the extent to which the Universities have benefited from private munificence. Space will permit of reference to the more important benefactions only.

The endowments to the Sydney University include the Challis Fund, £393,258; the G. H. Bosch Fund, £268,944; the P. N. Russell Fund, £101,456; the Oswald Watt Fund, £108,975; and the Fisher Estate, £43,386. In addition, the University receives a large annual revenue from the trustees of the McCaughey bequest. Excluding the principal of the latter, the credit balances of the private foundations amounted to £1,428,936 at 31st December, 1942. In 1930 a sum of £100,000 was received from the Rockefeller Foundation in aid of the building and equipment of a clinical laboratory for the medical school.

Mr. David Edward Lewis in 1941 bequeathed approximately £700,000 to trustees to provide scholarships at the Melbourne University for boys from State elementary and secondary schools. This bequest is the largest made in Australia for educational purposes.

Mr. Sidney Myer's gifts for various special and general purposes amounted to £60,000, while Sir Samuel Gillott, Mr. Edward Wilson (Argus Trust), and Sir Samuel Wilson contributed £41,000, £34,000, and £30,000 respectively. The estate of the late Miss Helen Mackie provided £40,000 for the endowment of pre-clinical chairs, while Mr. R. B. Ritchie's gifts for the endowment of a Chair of Economics amounted to £30,000, and a similar sum was received from the Supreme Court Library Fund for the endowment of a Chair of Public Law. Dr. James Stewart founded scholarships in Anatomy, Medicine and Surgery to the capital value of £26,000. The Hon. Francis Ormond contributed

£20,000 to the University as well as benefactions to Ormond College amounting to considerably over £100,000 and the late Dr. F. Haley left £45,000 for medical research. Requests of approximately £20,000 each for general purposes were made by Mr. John Hastie and Mr. C. D. Lloyd, while a similar sum was bequeathed by the late Sir John Higgins for research scholarships in industrial chemistry and biochemistry as related to the pastoral and agricultural industries. The late Mr. E. Truby Williams gave £52,000 for the Conservatorium of Music, library and general purposes.

Queensland University, to 30th April, 1943, had received £215,221 from the McCaughey estate, and £37,365 from the Walter and Eliza Hall Trust, while the Hon. T. C. Beirne gave £20,000 in 1935 for the endowment of a Chair of Law in Queensland. The permanent site for the University and other land valued at £62,000 were presented by Dr. and Miss Mayne.

The chief benefactors to the Adelaide University were Sir Thomas Elder, £100,000; Sir George Murray, £90,000; Sir Langdon Bonython, £72,000; Miss M. T. Murray, £45,000; Mr. T. E. Barr Smith, £45,000; Dr. F. Lucas Benham, £44,000; Mrs. Jane Marks, £30,000; Edward Neale, £27,000; Mrs. R. F. Mortlock and J. T. Mortlock, £25,000; Family of John Darling, £25,000; Sir William Mitchell, £25,000; and R. Barr Smith and family, £20,000. Several valuable properties, in addition to shares which realized £58,450, were also bequeathed to this University by Mr. Peter Waite, the total value of the bequest being estimated at £100,000.

Under the will of Sir Winthrop Hackett the University of Western Australia received £425,000, in addition to the endowment of the Chair of Agriculture, for the erection and maintenance of University buildings and for studentships, scholarships, bursaries and other financial help for deserving students, while the late Robert Gledden bequeathed an estate valued at £60,000, particularly to provide travelling scholarships.

6. **University Expenditure.**—The principal item of disbursements under the general University activities consists of the salaries of teaching staff or 71.2 per cent of the total. In the following table is given the expenditure incurred during 1942. **excluding capital expenditure on buildings:—**

UNIVERSITIES : EXPENDITURE, GENERAL ACTIVITIES, 1942.

University.	Admin- istration.	Maintenance of—			Other.	Total.
		Teachers' Department.	Premises.	Libraries.		
	£	£	£	£	£	£
Sydney .. .. .	23,058	189,002	19,278	8,880	11,102	251,320
Melbourne .. ..	14,608	144,149	18,704	6,469	20,247	204,177
Queensland (Brisbane) ..	7,684	66,889	5,827	3,953	7,478	91,831
Adelaide .. .. .	5,417	89,281	8,533	4,967	13,420	121,618
Western Australia (Perth)	3,917	29,441	5,716	2,675	2,345	44,094
Tasmania (Hobart) .. .	2,215	11,984	1,227	1,136	1,489	18,051
New England University College .. .. .	3,134	9,073	3,941	987	9,659	26,794
Canberra University College	892	2,600	127	51	30	3,700
<b>Total .. .. .</b>	<b>60,925</b>	<b>542,419</b>	<b>63,353</b>	<b>29,118</b>	<b>65,770</b>	<b>761,585</b>

7. **Extra-University Activities.**—(i) *General.* The tables shown in paragraphs 4 and 6 relate to the general University activities while the following tables show the financial position of all extra-university activities. The heterogeneous character of the items in the statements for these activities varies to the extent between the Universities that comparisons of the totals are misleading, but they include all items excluded from the general statement and give useful information within limits.



(ii) *Receipts, Extra-University Activities.* The following table shows the main receipts for the year 1942.

### UNIVERSITIES : RECEIPTS, EXTRA ACTIVITIES, 1942.

University.	Government Grants.	Interest, Rent, and Dividends.	Candidates' Fees, Public Examination.	Research Grants.	Other.	Total.
	£	£	£	£	£	£
Sydney .. ..	1,250	27,516	126	55,074	2,933	86,899
Melbourne .. ..	7,500	22,775	29,000	12,553	(a)43,653	115,481
Queensland (Brisbane) ..	..	1,988	11,527	6,602	324	20,441
Adelaide .. ..	5,250	9,982	7,995	11,157	4,658	39,042
Western Australia (Perth) .. ..	183	10,273	6,566	3,347	(b)4,360	24,729
Tasmania (Hobart) .. ..	..	..	1,461	8,860	286	10,607
New England University College <sup>1</sup> .. ..	..	..	..	..	..	..
Canberra University College .. ..	1,760	..	..	75	30	1,865
<b>Total .. ..</b>	<b>15,943</b>	<b>72,534</b>	<b>56,675</b>	<b>97,668</b>	<b>56,244</b>	<b>299,064</b>

(a) Includes receipt, Superannuation Fund £16,647, and University Press, £7,899.  
University Press £2,656.

(b) Includes

(iii) *Expenditure, Extra-University Activities.* The following table shows the main items of expenditure for the year 1942.

### UNIVERSITIES : EXPENDITURE, EXTRA ACTIVITIES, 1942.

University.	Salaries, Fees, etc.	Public Examination Expenses.	Adult Education and Extension.	Special Research Expenses.	Other.	Total.
	£	£	£	£	£	£
Sydney .. ..	6,478	..	4,941	55,462	7,252	74,133
Melbourne .. ..	11,199	16,288	4,914	12,667	(a)48,900	93,968
Queensland (Brisbane) ..	..	10,778	88	5,425	1,812	18,103
Adelaide .. ..	4,801	6,576	729	9,773	4,654	26,533
Western Australia (Perth) .. ..	..	5,765	1,474	2,497	(b)8,501	18,237
Tasmania (Hobart) .. ..	..	1,274	57	6,219	733	8,283
New England University College .. ..	..	..	..	..	..	..
Canberra University College .. ..	..	..	30	..	(c)1,760	1,790
<b>Total .. ..</b>	<b>22,478</b>	<b>40,681</b>	<b>12,233</b>	<b>92,043</b>	<b>73,612</b>	<b>241,047</b>

(a) Includes University Press £8,203, Superannuation Fund £21,779.  
Press £2,392.

(b) Includes University

(c) Scholarships, etc.

8. *University Extension.*—Some account of the initiation and progress of university extension is given in preceding Official Year Books (see No. 22, p. 446).

9. **Canberra University College.**—The question of the establishment of a University at the Australian Capital is still under consideration, and in the meantime a University College has been established under the Canberra University College Ordinance 1929-1940. By virtue of a temporary regulation of the University of Melbourne, which expires on 31st December in the year following that in which the present war terminates, the College is empowered to provide approved lectures in the subjects of the Arts Science, Commerce and Law courses in preparation for certain degrees and diplomas of that University. Lectures commenced in 1930 with the aid of several part-time lecturers, and 30 students were enrolled during the year. In 1942 the students numbered 63, including 20 enrolled at the Melbourne University. The staff, in 1942, consisted of two full-time and five part-time lecturers.

10. **New England University College.**—New England University College, comprising a Faculty of Arts and Economics and a Faculty of Science, is governed by the University of Sydney. It is situated at Armidale, on the Northern Tablelands of New South Wales. The present main university building stands in 183 acres of land and was presented to the University College by T. R. Forster, Esq., in 1937. The Government of New South Wales bore the expense of converting it to its present use. Lectures began at the College on 14th March, 1938. Students wishing to proceed to degrees in Economics, Veterinary Science and Agriculture may take the earlier courses at the College. In 1942 there were seventeen lecturers, including one part-time, eight demonstrators and tutors including six part-time, and nine honorary lecturers, 120 students taking courses leading to degrees and 23 students taking diploma courses. In addition Extension Board courses were conducted, and short schools were open to the general public in vacation periods.

11. **Workers' Educational Associations.**—In 1913 Workers' Educational Associations were formed in all the States of Australia, and later in New Zealand. The movement has for its object the bringing of the University into closer relationship with the masses of the people, and thereby providing for the higher education of the workers in civic and cultural subjects. There are now direct grants from all State Governments except Western Australia and Queensland. The particulars of grants for classes in 1942 were as follows :—New South Wales, £6,000, 48 classes, 63 discussion groups and 9 study circles; Victoria, £3,900, 39 tutorial classes, 3 "carry on" groups and 23 "box scheme" groups and extension work; Tasmania, £1,600, 9 classes; South Australia, £2,250, 7 tutorial classes, 9 lecture classes, 3 study circles, 3 discussion groups and extension lectures at country centres. In addition, the New South Wales and South Australian Associations each receive a Government grant for general organizing purposes of £770 and £240 respectively. The New South Wales association received an additional grant of £1,100 from the State Government in 1942 from a sum provided in the 1942-43 budget for "Extension of Adult Education." The Carnegie Corporation has in recent years shown its interest in the work by allotting substantial grants to the Associations and to the Universities. The principal subjects chosen in all States are Industrial History, Economics, Political Science and Sociology, but there is an increasing number of classes in other subjects such as History, Psychology, Philosophy, Literature, Music, Physiology and Biology. The Universities in New South Wales, Victoria and South Australia co-operate with the W.E.A. in the formation of a joint committee for tutorial classes, which supervises the work with the assistance of a University officer with the title of Director of Tutorial Classes. In addition to the longer University tutorial classes, many preparatory classes, study circles, and summer schools are organized by the Association, numerous courses of public lectures are delivered, educational conferences are promoted, and an extensive book service is spreading educational literature throughout Australia.

## § 7. Universities Commission.

1. **General.**—The Universities Commission is a new body, having been constituted by the Commonwealth Government at the beginning of 1943. The primary objects for which the Commission was constituted are to advise the Government on questions of man power in so far as they relate to the training of University students, to attract able students to the University and to administer the scheme of financial assistance.

From the commencement of the present war, the Federal Government has recognized the vital necessity of a continuing flow of properly trained graduates from certain of the faculties of the Universities, particularly from the six faculties of Medicine, Dentistry, Engineering, Science, Veterinary Science and Agriculture. The policy of the Government had, therefore, always been to reserve a number of students to commence and to continue those courses.

As the war developed, it became necessary to determine accurately the number of students who could be reserved and further, to administer more closely the scheme of reservation.

2. *Students Reserved.*—The Universities Commission was therefore given the function of advising the Government on the number of students who should be reserved to commence first year courses in the six faculties mentioned. On the advice of the Commission, the Government agreed to increase the number of students who could be reserved to commence courses in these faculties in 1943 by over 100 and in fact agreed to reserve approximately 1,600 students in this way. The number of students reserved in all years in these faculties in 1943 was approximately 4,670.

In addition the system of reservation was, on the advice of the Commission, extended this year to cover the faculties of Arts, Law, Economics or Commerce and Architecture, and approximately 560 reserved places in all years in those faculties were provided.

Finally in order to make the best possible use of University facilities, the Government adopted, through the Commission, the policy of endeavouring to attract able students to the Universities. To this end various steps were taken to explain to students leaving school the opportunities available at the Universities and the national requirements in respect of trained graduates. Moreover, the scheme of financial assistance was introduced in order to ensure that able students would not be prevented from considering University courses because of their financial position.

Active steps were taken to explain to students and to the public generally the necessity for reserved students continuing their courses without interruption until graduation and that in general no reserved student could be allowed to enlist.

3. *Financial Assistance.*—(i) *General.* Under this scheme, assistance is available (subject to a means test) to all reserved students enrolled in the degree courses of Medicine, Dentistry, Engineering, Science, Veterinary Science and Agriculture, in the Australian Universities. In addition, provision was made for assistance to a limited number of reserved students enrolled for degree courses in the four following faculties, namely, Arts, Law, Economics or Commerce and Architecture. However, not all reserved students in these four faculties were eligible for assistance under the means test, and the Commission has announced that in 1943 it was able to assist all reserved degree students in the ten faculties mentioned who made application for assistance and who were eligible for assistance under the means test.

(ii) *Scale of Assistance.* The maximum assistance granted to a student is the payment of all his University fees plus a living allowance of £104 per annum if he is living with a parent or £143 per annum if he is not living with a parent. In addition an allowance of up to £10 may be made over the whole course towards the cost of the purchase or hire of necessary instruments. The maximum assistance is payable when the adjusted income (which is explained below) does not exceed £250 per annum. For every £10 by which the adjusted income exceeds £250 per annum, the assistance is reduced by £5 4s. per annum.

The adjusted income is ascertained by taking the taxable income of the student and of his parents and by deducting therefrom £50 for each dependent child under sixteen. The assistance is supplementary to any other assistance which a student receives and this Commission deducts from its assistance the value of any scholarship or other award held by a student.



(iii) *Number Assisted.* Up to 1st October, 1943, assistance had been granted to 1,595 students. These students had received an average of £113 each. It has been estimated that the scheme of financial assistance will involve payments to University students of at least £250,000 in the financial year ending 30th June, 1944.

The number of students receiving assistance in each of the ten faculties mentioned is as follows :—

Medicine, 458 ; Science, 480 ; Engineering, 358 ; Dentistry, 103 ; Agriculture, 63 ; Veterinary Science, 34 ; Arts, 55 ; Economics, 31 ; Architecture, 3 ; and Law, 10.

One feature of the introduction of financial assistance is that apparently it has enabled students to start University courses who would otherwise not have been able to contemplate them. This may be shown by the fact that approximately 50 per cent. of assisted students are first year students. The following table shows the number of students assisted in all years in each of the Universities of Australia and, in brackets, the number of students assisted in first year :—

Total number assisted—Sydney, 672 (322) ; Melbourne, 398 (168) ; Adelaide, 198 (123) ; Queensland, 149 (79) ; Western Australia, 143 (72) ; Tasmania, 35 (23).

## § 8. Technical Education.

1. *General.*—Although provision has been made in all of the States for many forms of technical education, the total expenditure figures still indicate a low proportion in comparison with the total educational votes. The rapid expansion of manufacturing industries in recent years, however, is increasing the demand for technically trained personnel, and the provision of facilities for such instruction is demanding and will need greatly increased expenditure.

In preceding issues of the Official Year Book an outline was given of the origin and development of technical education in each State (see No. 22, pp. 447–51), but considerations of space preclude the inclusion of more up-to-date information.

2. *Schools, Teachers and Students.*—The number of schools, teachers and enrolments of individual students during 1941 are given in the following table :—

### TECHNICAL EDUCATION : SCHOOLS, TEACHERS AND ENROLMENTS, 1941.

State.	Schools or Colleges.	Teachers.			Individual Students Enrolled.	
		Full-time.	Part-time.	Total.	Male.	Female.
New South Wales ..	26	340	1,097	1,437	30,368	10,615
Victoria(a) ..	31	879	504	1,383	31,079	9,797
Queensland..	13	104	117	221	5,395	998
South Australia ..	17	(b)	(b)	307	6,674	3,844
Western Australia ..	8	43	186	229	4,147	2,152
Tasmania(a) ..	6	46	187	233	2,442	721
Total ..	101	..	..	3,810	80,105	28,127

(a) Includes junior enrolments, 9,137 males and 1,463 females in Victoria, and 700 males and 45 females in Tasmania, as teaching staff and expenditure cover both senior and junior sections.

(b) Not available.

The number of individual scholars enrolled during the last five years are given below. In order to make the figures comparable enrolments at Junior Technical Schools are omitted from the Victorian and Tasmanian totals.

#### TECHNICAL EDUCATION : INDIVIDUAL STUDENTS, 1937 TO 1941.

State.	1937.	1938.	1939.	1940.	1941.
New South Wales .. ..	26,188	30,865	37,264	38,536	40,983
Victoria .. ..	24,130	26,859	28,844	29,706	30,276
Queensland .. ..	15,652	16,388	6,397	7,069	6,393
South Australia .. ..	9,247	9,610	9,721	9,980	10,518
Western Australia .. ..	5,232	5,382	5,673	6,210	6,299
Tasmania .. ..	1,253	1,316	1,316	2,065	2,418
<b>Total .. ..</b>	<b>81,702</b>	<b>90,420</b>	<b>89,215</b>	<b>93,566</b>	<b>96,887</b>

3. Expenditure.—The expenditure on technical education in each State for 1941 is shown below :—

#### TECHNICAL EDUCATION : EXPENDITURE, 1941.

State.	Salaries and main-tenance.	Equipment.	Buildings.	Total.	Receipts—Fees, etc.	Net Expendi-ture.
	£	£	£	£	£	£
New South Wales ..	333,316	67,598	62,918	466,173	85,341	380,832
Victoria(a) ..	396,707	9,891	69,741	497,948	92,347	..
Queensland ..	81,377	18,504	17,130	117,101	21,647	95,454
South Australia ..	73,987	6,315	7,842	88,535	18,252	70,283
Western Australia ..	23,224	3,502	1,628	38,354	2,346	36,008
Tasmania(a) ..	34,027	6,203	14,037	56,620	5,221	51,399
<b>Total ..</b>	<b>942,638</b>	<b>112,013</b>	<b>173,296</b>	<b>1,264,731</b>	<b>225,154</b>	<b>..</b>

(a) Includes the expenditure on Junior Technical Schools.

Fees and other receipts are paid into Consolidated Revenue in all States except Victoria, where they are retained and spent by the Technical School Committee. The expenditure on buildings is largely financed from loan moneys; the sums provided from this source in 1941 were :—New South Wales, £43,642; Victoria, £61,608; Queensland, £16,055; South Australia, £6,476; Western Australia, £872; and Tasmania, £12,458.

The expenditure on maintenance for technical education in Australia in 1941 amounted to 2s. 6s. per head of population, as compared with 30s. 7d. per head expended on maintenance for primary and secondary education.

### § 9. Business Colleges and Shorthand Schools.

There has been a considerable development in recent years both in the number and scope of privately conducted institutions which aim at giving instruction in business methods, shorthand, typewriting, the use of calculating machines, etc. Particulars for

all States, so far as they are available, are given in the following table. Owing to the varying methods employed in the States it is not possible to give any comparative figures of enrolment :—

**BUSINESS COLLEGES, SHORTHAND SCHOOLS, ETC., 1940.**

State.	Schools.	Teachers.	Average Attendance of Students.	
			Males.	Females.
New South Wales .. .. .	57	346	(a) 2,410	(a) 5,287
Victoria(b) .. .. .	22	172	2,970	3,209
Queensland .. .. .	12	48	247	963
South Australia .. .. .	14	81	(c) 1,463	(c) 1,866
Western Australia .. .. .	14	74	(a) 4,212	(a) 1,558
Tasmania .. .. .	4	15	92	285
<b>Total .. .. .</b>	<b>123</b>	<b>736</b>	<b>11,394</b>	<b>13,168</b>

(a) Average weekly enrolment; attendance figures not available.

(b) Year 1939.

(c) Individual students enrolled.

In addition to those shown above for South Australia there were 2,953 males and 71 females receiving instruction from interstate schools by correspondence. Particulars regarding fees received in 1940 are available for Western Australia and Tasmania only, the respective figures being £37,561 and £5,463.

## § 10. Miscellaneous.

1. **Scientific Societies.**—(i) *Royal Societies.* In previous issues of the Official Year Book an outline was given of the origin and progress of the Royal Society in each State (see No. 22, pp. 454–5). The accompanying table contains the latest available statistical information regarding these institutions, the head-quarters of which are in the capital cities.

**ROYAL SOCIETIES : PARTICULARS, 1942.(a)**

Particulars.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.
Year of origin .. .. .	1,866	1,854	1,884	1,834	1,913	1,843
Number of members .. .. .	292	195	213	136	154	228
Vols. of transactions issued .. .. .	75	84	54	67	27	77
Number of books in library .. .. .	37,200	18,000	7,200	9,100	5,350	20,264
Societies on exchange list .. .. .	239	322	240	275	182	270
Income .. .. . £	1,423	607	117	950	277	225
Expenditure .. .. . £	942	628	253	940	172	224

(a) The Royal Society of Australia, with head-quarters at Canberra, was founded on 25th July, 1930, and received permission to use its title on 14th January, 1931. The members, including associates numbered 114 in 1942. Income and expenditure for the year amounted to £28 and £8 respectively.

(ii) *The Australian and New Zealand Association for the Advancement of Science.* This Association was founded in 1887. Its head-quarters are at Science House, Gloucester-street, Sydney, and meetings are usually held biennially within the various States and in the Dominion of New Zealand. The next meeting has been postponed indefinitely owing to the war.



(iii) *Other Scientific Societies.* The Linnean Society of New South Wales, with head-quarters in Sydney, was founded in 1874. The soundness of its present position is due to the benefactions of Sir William Macleay, who during his lifetime and by his will endowed the society to the amount of £67,000, which has been increased by judicious investment to over £85,000. The Society maintains a research bacteriologist and offers annually 4 research fellowships in various branches of natural history. Four fellowships were awarded in 1941. The library comprises some 15,000 volumes, valued at about £7,500. Sixty-six volumes of proceedings have been issued, and the Society exchanges with about 240 kindred institutions. The ordinary membership at the end of 1941 was 177.

The British Astronomical Society has a branch in Sydney, and in each of the States the British Medical Association has a branch.

In addition to the societies enumerated above, there are various others in each State devoted to branches of scientific investigation.

2. *Libraries.*—(i) *Commonwealth*—(a) *Parliamentary and National Library.* When the Commonwealth Parliamentary Library was created in 1902, it was recognized that when the Australian Capital was established it would be necessary to have available there, for the use of Members, Government Departments and the public, a library sufficient for their requirements, and therefore wider in scope than a purely Parliamentary Library. The ideal of a great general library was kept in view, and standard works were systematically acquired. At the same time, the first Library Committee conceived the idea of a National Library for the use and benefit of the people of Australia. The policy was therefore pursued of securing, as far as possible, all works and documents connected with the discovery, settlement and early history of Australia, New Zealand and the Pacific Islands.

In 1909 a valuable collection of *Australiana*, comprising about 10,000 volumes and 6,500 pamphlets, maps, documents and pictures—the library of Mr. E. A. Petherick—was acquired. In 1912 a provision was included in the Commonwealth Copyright Act requiring the publisher of every book, pamphlet, etc., printed in Australia to supply a copy free to the library. In the same year the publication of the *Historical Records of Australia* was begun, and 34 volumes were issued before publication was temporarily suspended in 1926.

The rapid development of the Australian and National sections of the Library, together with the purchase of the Cook manuscripts, persuaded the Library Committee in 1923 that the title “Commonwealth National Library” should be adopted. Consequent upon the transfer of the Library to Canberra in 1927 the policy of dividing the Library into two sections was adopted—the Parliamentary reference collection to be housed in Parliament House and the National and Public section in a separate building, both to remain under the one general administration. The erection of the first wing of the permanent National Library building was completed in 1935, and is designed to meet the requirements of University students and the general public, to whom the privileges of the Library have been extended in respect to borrowing as well as reference. The design for the complete building makes ample provision for the housing of special collections and for the proper display of the valuable records of Australian history which the Library possesses. In 1936 a further development in the scope of the National Library was the establishment of an Historical Film and Speaking Record Section.

The work of the National Library was also extended in 1936 as the result of a grant of \$7,500 in three annual instalments of \$2,500 from the Carnegie Corporation of New York for the establishment of library and reading facilities to outlying Australian Territories. Collections of books are regularly sent to the Northern Territory, Papua, New Guinea, Central Australia, Norfolk Island and Nauru.

In 1940, Gregory M. Mathews, C.B.E., presented to the Library his collection of Australian ornithological works comprising approximately 5,000 items.

One effect of the war on the library has been to increase the demands made by the Departments and war authorities set up by the Government for specialized material and research in war administrative problems. To meet this and because so many of the Departments are in Melbourne the library opened a liaison office there in 1942. The office is located in the Department of War Organization of Industry Building, Collins-street, Melbourne.

Consequent on the report of the War Archives Committee appointed by the Prime Minister in 1942 the library was created a provisional archives repository for administrative records of the non-service departments and the war memorial for those of the Services.

The number of volumes in the National and Parliamentary collections was, at the end of June, 1942, 167,814 books, the outstanding feature of the National collection being a unique collection of Captain Cook manuscripts, while the Parliamentary section contains an extensive series of official publications of Great Britain, the Dominions, and foreign countries. The following publications are issued by the Library: Historical Records of Australia—34 volumes, 12s. 6d. per volume; Parliamentary Handbook and record of elections—nine issues, 10s. 6d. per volume; Annual catalogue of Australian publications—three issues, 2s. per volume; Select list of representative works dealing with Australia (reprinted from the Official Year Book)—six issues.

(b) *Patent Office Library.* The free library attached to the Commonwealth Patent Office, Canberra, contains over 55,000 volumes. Patent specifications of inventions are received from the principal countries of the world, together with official publications dealing with Patents, Trade Marks and Designs. A wide range of technical literature and periodicals is available.

(ii) *States.* In each of the capital cities there is a well-equipped Public Library, the institutions in Melbourne and Sydney especially comparing very favourably with similar institutions elsewhere. The following statement gives the number of volumes in the Public Library of each capital city at 30th June, 1942:—

#### METROPOLITAN PUBLIC LIBRARIES, 1941-42.

City.	Number of Volumes in—			Total.
	Reference Branch.	Ordinary Lending Branch.	Country Lending Branch.	
Canberra(a) .. ..	167,814	..	(b)	..
Sydney .. .. .	(c) 412,742	(d)	97,303	510,045
Melbourne(e) .. ..	501,324	81,852	25,716	608,892
Brisbane .. .. .	(f) 42,106	..	..	42,106
Adelaide .. .. .	205,233	(g)	(h) 12,285	217,518
Perth .. .. .	165,724	..	(i) 27,952	193,676
Hobart(e) .. .. .	39,578	(j) 12,029	..	51,607

(a) Includes Parliamentary section. (b) Books are lent to libraries or students throughout Australia whenever necessary for research work. (c) Includes 138,133 volumes in the Mitchell Library. (d) The maintenance and control of the ordinary lending branch of the Public Library at Sydney were transferred in 1908 to the Municipal Council. At 31st December, 1940, the books numbered 57,720. (e) Year ended 31st December, 1942. (f) Year ended 30th June, 1940. (g) The Adelaide Circulating Library at 30th June, 1941, contained 90,558 books. (h) Includes 4,788 volumes in Children's Branch. (i) Includes 7,914 volumes in the School Libraries Branch. (j) Includes 2,717 volumes in the Children's Branch.

In connexion with the Country Lending Branch of the Sydney Public Library, it may be noted that books are forwarded on loan to State schools, to approved associations, to Schools of Arts and to individual students. During 1940-41, over 65,000 books were lent to small State schools, 14,637 to Schools of Arts, 7,035 to branches of the Teachers' Federation and 980 to Agricultural Bureaux, while 58,604 reference works were lent to individual country students.

A special research staff attached to the Sydney Public Library gives valuable assistance in making readily available to inquirers the store of information contained in books, etc., which, owing to limitations of space, are not in open access. 17,952 references were added in 1940-41 to the catalogue, which now contains 342,291 references.

The Mitchell Library in Sydney of more than 60,000 volumes and pamphlets, and 300 paintings, principally relating to Australasia, and valued at £100,000, was bequeathed to the trustees of the Public Library in 1907 by Mr. D. S. Mitchell, together with an endowment of £70,000. The testators stipulated that the regulations of the British Museum were to be adopted as far as practicable, hence the library is the resort of specialists. There are now 138,133 volumes in the library in addition to valuable manuscripts, collections of Australian postage and fiscal stamps, and various pictures, coins, etc.

Other important libraries in New South Wales are the Australian Museum, 30,758 volumes; Teachers' Colleges, 63,814; Technical Colleges, 30,574; Public Schools, 603,052; Railways' Institute, 139,761; Road Transport and Tramways Institute, 35,968; and the Cooper Library of the New South Wales Public School Teachers' Federation and the library at the Botanic Gardens, each of 10,000 volumes. At 30th June, 1942, the Parliamentary Library contained 89,490 volumes.

The reading room at the Melbourne Public Library ranks among the finest in the world. It was opened in 1913, and has a diameter of 114 feet, with a similar height and is capable of seating 320 readers at a time, all of whom are under observation from the centre of the room. The Library forwards volumes on loan to Mechanics' Institutes and Free Libraries, and to individual borrowers in the country. During 1941 the volumes added to the reference branch by purchase, donation, etc., numbered 6,170, additions to the lending branch numbered 5,259.

For some years past efforts have been made in South Australia to collect original documents likely to be of service in compiling a history of the State. As far back as 1914, Professor Henderson, of Adelaide University, under commission from the South Australian Government, visited and reported on the system of keeping archives in England, France, Belgium, Holland and Ceylon, and obtained valuable information also from the United States of America and Canada. A department of historical documents has been created under the care of an archivist, and valuable work has been done in connexion with examination, classification and permanent preservation of the valuable papers. A suitable building for housing the documents and the staff was provided in 1921. At 30th June, 1941, the collection numbered 315,262 documents, 18,126 views and 1,600 maps.

For the year ended 30th June, 1942, accessions to the Public Library at Perth numbered 3,354 volumes.

The Tasmanian Public Library lends books to individual country borrowers and to families or committees of residents in country districts. The Public Library at Launceston contains 43,118 volumes. Books added to the Public Libraries at Hobart and Launceston during the year 1941 numbered 1,151 and 1,056 respectively.

Statistics in regard to other libraries are not available for all States, and the information supplied is not in all cases complete. Returns for Victoria in 1940 showed a total of about 420 libraries in receipt of State or municipal aid, but, apart from the Melbourne Public Library statistics are now only collected from 24 institutions in Greater Melbourne and 42 in the chief extra-metropolitan towns. These libraries contained approximately 475,000 volumes. Queensland returned a total of 193 libraries with 554,627 books in 1939-40, although libraries other than the State Public Library do not receive Government aid. Although 258 suburban and country institutions were recorded in South Australia during 1940 statistics were collected from only 247 which returned 706,734 volumes, and in Tasmania 82,336 volumes were distributed between 26 libraries other than the Hobart and Launceston public libraries.

(iii) *University Libraries.* The libraries of the Australian universities perform two important functions in Australian life and development; they provide material not only for the education of graduates and undergraduates, but for scholars, research



workers and practical investigators all over the continent, since no genuine student is refused access to them. Much of the material they contain is not available elsewhere, for although in most cases smaller, they are in many directions more highly specialized than the public libraries, whose resources they are thus able to supplement. They lend to one another and to State and private institutions as well as to individual investigators, and they both lend to and borrow from the public and scientific libraries. Each of them is governed by a librarian, who is responsible as a rule to an executive sub-committee and a committee which is practically co-extensive with the professorial staff. In size the Library of the University of Sydney is the third in Australia, and the Libraries of the Universities of Adelaide and Melbourne are respectively seventh and eighth. The following table shows the sizes and rates of growth of the Australian university libraries; it is impossible to give borrowing statistics, as they differ too widely to be comparable without much explanation. The number of current periodicals refers to those subscribed to. The war has prevented the receipt of a number for which subscriptions have been paid. During 1940 the Queensland University Library received several large gifts.

## UNIVERSITY LIBRARIES, 1942.

University.					Number of Volumes.	Yearly Accessions.	Number of Current Periodicals. (1940.)
Sydney	..	..	..	..	273,548	5,283	3,424
Melbourne	..	..	..	..	121,938	3,282	1,547
Queensland	..	..	..	..	73,966	9,350	900
Adelaide	..	..	..	..	135,000	3,704	2,274
Western Australia	..	..	..	..	66,705	1,533	465
Tasmania	..	..	..	..	46,671	1,617	250
New England University College	..	..	..	..	9,690	1,610	..
Canberra University College	..	..	..	..	1,654	47	..

The first books were bought for the Library of the University of Sydney as early as 1851; only since 1910, however, has it possessed a building of its own. It is named after its principal benefactor, Thomas Fisher, who bequeathed to it in 1885 the sum of £30,000. It contains an up-to-date bookstack of glass and steel and a fine reading room in which since the beginning of 1941 about 18,000 volumes of the collection have been made available on open access shelves. In addition members of the teaching staff, and certain classes of undergraduates, are admitted to the bookstacks; all readers are encouraged to borrow freely. The Library possesses a large number of periodicals, especially scientific, valuable collections of seventeenth century pamphlets and Elizabethan translations from the classics, and an extensive collection of Australian literature. Besides a medical branch, there are a number of departmental libraries.

Early in 1854 the Council of the University of Melbourne made its first allocation for books, but the Library was housed in temporary and unsatisfactory quarters for a number of years, and consequently growth was slow and complaints were frequent. In recent years the University authorities have treated the Library generously, and there have been some welcome benefactions, but accommodation is insufficient and a new library building is one of the most pressing needs of the University. All the books are accessible on open shelves, and though the Library is intended primarily for reference purposes, borrowing, except of text-books and certain valuable volumes, is made as easy as possible. The Library is administered from the centrally-situated general library: there is a large medical branch library specially rich in periodicals, and smaller branch libraries are accommodated in some of the science departments.

The Library of the University of Queensland began 27 years ago with £3,000 worth of books, £2,000 having been raised by public subscription and £1,000 granted by the Government. At present it shares a building with a science department. There are several departmental libraries.

The Adelaide University Library bears the name of its original benefactor, Robert Barr Smith, who, with members of this family in and after 1892, gave the University about £50,000 for library purposes. Some 20,000 volumes are shelved in the reading room, and available to the ordinary student. Up-to-date steel bookstacks provide accommodation for about 100,000 volumes, and additions now planned will be capable of housing a further 500,000. Borrowing facilities are available to all matriculated students, to country students and to graduates. There are medical and law departmental libraries. The medical library has on permanent loan the collection of the Institute of Medical and Veterinary Science, and also incorporates the library of the British Medical Association (South Australian Branch).

In the University of Western Australia the first permanent library staff was not appointed until 1927. A special feature is the use made of student co-operation. The whole collection is accessible on open shelves, and there are several departmental libraries.

The Library of the University of Tasmania was founded in 1893, but for many years it comprised little more than a collection of text-books. In 1913 a substantial increase of funds was allotted and important gifts were received. In 1919 it was organized for the first time in accordance with modern library practice. Its growth has been steady since 1925.

The New England University College Library was founded in 1938, and bears the name of its first benefactor, Sir William Dixon. It contains 9,242 volumes which are on open shelves.

The Canberra University College Library was established in 1938. It contains 2,395 volumes, which are on open shelves; reference books may be borrowed.

3. Public Museums and Art Galleries.—Previous issues of the Official Year Book contained a brief description of the public museums and art galleries in each State (see No. 22, pp. 457-9), but considerations of space preclude the incorporation of this information in the present volume.

4. State Expenditure on Education, Science and Art.—The expenditure in each State on education, science and art during the year 1941-42 is given in the following table. Owing to the details not being available in all States the figures exclude officers' pensions and interest and sinking fund on capital expended on buildings. The cost of the medical inspection of school children is also excluded, as this service is more appropriately classified under Public Health, etc. :—

#### STATE EXPENDITURE ON EDUCATION, SCIENCE AND ART, 1941-42.

State.	Expenditure from—				Receipts.	Net Expenditure.
	Revenue.	Loan.	Other Funds.	Total.		
	£	£	£	£	£	£
New South Wales	5,883,228	343,561	..	6,226,789	143,712	6,083,077
Victoria..	3,252,808	134,653	10,450	3,397,911	65,033	3,332,878
Queensland ..	1,878,463	99,382	15	1,977,860	20,975	1,956,885
South Australia ..	1,121,081	19,579	..	1,140,660	33,184	1,107,476
Western Australia	928,995	22,012	..	951,007	29,206	921,801
Tasmania ..	440,300	21,958	..	462,258	66	462,192
	13,504,875	641,145	10,465	14,156,485	292,176	13,864,309

(a) In addition, fees in respect of technical education amounting to £91,520 were received and spent by the School Councils.

## CHAPTER VII.

### PUBLIC JUSTICE.

#### § 1. Lower (Magistrates') Courts.

1. **General.**—In considering the criminal returns of the various States, due allowance must be made for certain factors, such as the relative powers of the higher and lower courts. In the case of lower courts, the actual number of laws in each State the breach of which renders a person liable to fine or imprisonment must be taken into account. Again, the attitude of the magistracy and police towards certain classes of offences is a factor, for in the case of liquor laws, or laws connected with vagrancy or gaming, the views of the magistrates, and instructions issued to the police, may be responsible for considerable variations in the returns. The strength and distribution of the police forces, and the age-constitution and distribution of the population of the States, also influence the results. Due weight should also be given to the prevalence of undetected crime, but information on this point is not available for all States. It may be mentioned that each State has its own separate judicial system, the Commonwealth jurisdiction being confined to the High Court of Australia, which is largely a Court of Appeal intermediate to the Privy Council although it has also original jurisdiction, the Commonwealth Court of Conciliation and Arbitration and the Federal Court of Bankruptcy. Full particulars regarding the judicial power of the Commonwealth will be found in Chapter III. of the Commonwealth Constitution, page 18.

2. **Powers of the Magistrates.**—Preceding issues of the Official Year Book contain a brief statement of the powers of the magistrates in the various States (see No. 22, p. 462), but this information is not repeated in the present volume.

3. **Cases Tried at Magistrates' Courts.**—The total number of cases tried at Magistrates Courts in each State is given below for the five years 1937 to 1941:—

#### CASES TRIED AT MAGISTRATES' COURTS.

State or Territory.	1937.	1938.	1939.	1940.	1941.
New South Wales ..	125,791	115,521	144,848	149,421	133,470
Victoria .. ..	74,222	79,056	82,858	86,287	77,003
Queensland(a) ..	33,467	35,434	32,501	28,653	25,783
South Australia ..	19,543	20,729	22,776	20,637	24,362
Western Australia ..	24,430	24,822	24,111	23,095	21,667
Tasmania .. ..	8,388	9,236	9,498	7,548	7,479
Northern Territory(a) ..	461	591	1,494	1,835	1,168
Australian Capital Territory	216	308	284	306	256
<b>Total .. ..</b>	<b>286,518</b>	<b>285,697</b>	<b>318,370</b>	<b>317,782</b>	<b>291,188</b>

(a) Year ended 30th June following.



Investigation of the returns shows that considerable variations in the figures for single States are occasioned by breaches of new Acts, or the more stringent enforcement of the provisions of existing Acts. Any deductions drawn from the total returns as to the increase or otherwise of criminality must, therefore, be largely influenced by a careful analysis of the detailed list of offences.

4. **Convictions.**—The figures given in the tabulation above include, of course, a number of people who were wrongly charged, and, statistically, are not of general importance. A classification of convictions of persons who appeared before the lower courts in each State during 1941 is given in the following table:—

#### CONVICTIONS AT MAGISTRATES' COURTS, 1941.

Offence.	N.S.W.	Vic.	Qld.(a)	S.A.	W.A.	Tas.	N.T.(a)	A.C.T.	Aust.
Against the Person ..	1,639	646	225	158	237	115	14	16	3,050
Against Property ..	10,019	4,783	1,939	1,211	2,093	649	51	52	20,797
Forgery and Offences against the Currency ..	49	..	1	10	..	..	1	..	61
Against Good Order ..	48,566	17,837	12,171	5,626	4,793	819	531	66	90,439
Other Miscellaneous ..	59,462	44,254	8,961	14,985	13,312	4,138	456	70	145,638
Total ..	119,735	67,520	23,297	21,990	20,435	5,721	1,053	234	259,985

(a) Year ended 30th June, 1942.

The following table shows the number of convictions in each year from 1937 to 1941:—

#### CONVICTIONS AT MAGISTRATES' COURTS.

State or Territory.	1937.	1938.	1939.	1940.	1941.
New South Wales ..	103,272	96,933	126,353	131,891	119,735
Victoria ..	64,772	68,841	72,186	75,712	67,520
Queensland(a) ..	29,893	32,047	28,920	25,640	23,297
South Australia ..	17,297	18,341	20,429	18,364	21,990
Western Australia ..	22,777	23,134	22,539	21,705	20,435
Tasmania ..	7,927	8,605	8,722	7,078	5,721
Northern Territory(a) ..	397	518	1,394	1,724	1,053
Australian Capital Territory	195	283	260	273	234
Total ..	246,530	248,702	280,803	282,387	259,985

(a) Year ended 30th June following.

5. **Convictions for Serious Crime.**—While the figures given in the preceding table refer to the entire body of convictions, the fact must not be overlooked that they include a large proportion of offences of a technical nature, many of them unwittingly committed, against various Acts of Parliament. Cases of drunkenness and minor breaches of good order, which, if they can be said to come within the category of crime at all, at least do so in a very different sense from some other offences, also help to swell the list. The following table has therefore been prepared for the purpose of showing the convictions at magistrates' courts for what may be regarded as the more serious offences, i.e., against the person and property, either separately or conjointly, and forgery and offences against the currency. Owing to the smallness of the population, the rates for the Northern Territory are subject to considerable variation.

CONVICTIONS FOR SERIOUS CRIME AT MAGISTRATES' COURTS.

State or Territory.	1937.	1938.	1939.	1940.	1941.
NUMBER.					
New South Wales ..	12,468	11,651	12,724	13,133	11,707
Victoria .. ..	5,289	6,064	5,727	5,653	5,429
Queensland(a) ..	2,278	2,467	2,402	2,275	2,165
South Australia ..	1,246	1,287	1,224	1,340	1,379
Western Australia ..	2,011	2,127	2,614	2,601	2,330
Tasmania .. ..	1,007	960	959	846	764
Northern Territory(a) ..	26	62	44	60	66
Australian Capital Territory	25	55	59	35	68
Total .. ..	24,350	24,673	25,753	25,943	23,908

PER 10,000 OF THE POPULATION.

New South Wales ..	45.99	42.82	46.28	47.31	41.82
Victoria .. ..	28.44	32.47	30.43	29.69	28.03
Queensland(a) ..	22.71	24.50	23.60	22.08	20.92
South Australia ..	21.08	21.72	20.53	22.40	22.97
Western Australia ..	43.99	46.24	56.21	55.58	49.79
Tasmania .. ..	42.14	40.73	40.29	35.21	31.91
Northern Territory(a) ..	45.07	106.04	62.59	63.71	67.80
Australian Capital Territory	24.40	49.44	49.21	27.46	51.08
Total .. ..	35.41	35.78	36.99	36.86	33.67

(a) Year ended 30th June following.

6. Rate of Convictions, 1881 to 1941.—Statistics of convictions reveal a consistent increase in the rate of serious crime from 1925 to 1931, when 37.1 convictions per 10,000 of the population were recorded. Following this comparatively high figure the rate declined to 32.4 in 1933 but increased considerably to 37.0 in 1939. In 1941 the rate declined to 33.7. The rate of convictions over a series of years is included below; only the more serious offences particularized in the preceding sub-section have been taken into consideration.

RATE OF CONVICTIONS FOR SERIOUS CRIME AT MAGISTRATES' COURTS :  
AUSTRALIA, 1881 TO 1941.

Year .. ..	1881.	1891.	1901.	1911.	1921.	1931.	1941.
Convictions per 10,000 persons ..	69.3.	44.8.	29.1.	24.6.	29.2.	37.1.	33.7.

7. Committals to Superior Courts.—(i) *General.* In a previous paragraph it has been pointed out that comparisons of criminality based on a consideration of the total returns from magistrates' courts are somewhat inadequate, inasmuch as the figures include numbers of cases which are merely technical breaches of laws having in some instances a purely local significance. The committals to higher courts give a better basis of comparison, although even in this connexion allowances must be made for the

want of uniformity in jurisdiction. A classification of the offences for which persons appearing in the lower courts were committed to higher courts in each State in 1941 is given below :—

#### COMMITTALS TO SUPERIOR COURTS, 1941.

Offence.	N.S.W.	Vic.	Qld.(a)	S.A.	W.A.	Tas.	N.T.(a)	A.C.T.	Aust.
Against the Person ..	511	232	146	122	46	15	6	9	1,087
Against Property ..	1,111	1,054	126	120	63	70	11	1	2,556
Forgery and Offences against the Currency ..	30	67	2	13	..	..	..	..	112
Against Good Order ..	13	4	..	1	1	..	..	..	19
Other Miscellaneous ..	52	43	2	27	4	4	..	..	132
Total .. ..	1,717	1,400	276	283	114	89	17	10	3,906

(a) Year ended 30th June, 1942.

The table below gives the number of committals in each year from 1937 to 1941, with the rate of such committals per 10,000 of the population :—

#### COMMITTALS TO SUPERIOR COURTS.

State or Territory.	1937.	1938.	1939.	1940.	1941.
NUMBER.					
New South Wales ..	1,771	2,048	2,288	2,211	1,717
Victoria .. ..	1,545	2,016	1,777	1,543	1,400
Queensland (a) ..	251	282	359	228	276
South Australia ..	230	220	259	199	283
Western Australia ..	181	206	129	211	114
Tasmania .. ..	91	66	82	85	89
Northern Territory (a) ..	16	2	12	17	17
Australian Capital Territory	3	4	18	5	10
Total .. ..	4,088	4,844	4,924	4,499	3,906

#### PER 10,000 OF THE POPULATION.

New South Wales ..	6.5	7.5	8.3	8.0	6.1
Victoria .. ..	8.3	10.8	9.4	8.1	7.2
Queensland (a) ..	2.5	2.8	3.5	2.2	2.7
South Australia ..	3.9	3.7	4.3	3.3	4.7
Western Australia ..	4.0	4.5	2.8	4.5	2.4
Tasmania .. ..	3.8	2.8	3.4	3.5	3.7
Northern Territory (a) ..	27.7	3.4	17.1	18.1	17.5
Australian Capital Territory	2.9	3.6	15.0	3.9	7.6
Total .. ..	5.9	7.0	7.1	6.4	5.5

(a) Year ended 30th June following.

(ii) *Rate of Committals since 1881.* With occasional variations the rate of committals for serious crime has remained fairly stable during recent years, and, if the comparison be carried back further, the movement in the rate has undergone very little change during the present century. The rate at intervals since 1881 is as follows :—

#### RATE OF COMMITTALS TO SUPERIOR COURTS : AUSTRALIA, 1881 TO 1941.

Year .. ..	1881.	1891.	1901.	1911.	1921.	1931.	1941.
Committals per 10,000 persons ..	12	11	8	6	7	8	6



8. Drunkenness.—(i) *Cases and Convictions.* The number of cases of drunkenness and the convictions recorded in connexion therewith during the period 1937 to 1941 are given in the following table:—

DRUNKENNESS : CASES AND CONVICTIONS.

State or Territory.	1937.		1938.		1939.		1940.		1941.	
	Cases.	Convictions.	Cases.	Convictions.	Cases.	Convictions.	Cases.	Convictions.	Cases.	Convictions.
New South Wales	29,672	27,651	29,610	27,181	32,472	32,405	34,710	34,575	34,683	34,637
Victoria ..	10,433	10,296	11,311	11,128	11,609	11,421	11,619	11,440	12,064	11,899
Queensland (a) ..	10,450	10,183	11,416	11,187	11,202	11,118	9,558	9,422	10,124	10,025
South Australia ..	2,529	2,520	2,662	2,653	2,607	2,597	2,594	2,580	3,837	3,818
Western Australia	2,708	2,678	2,513	2,479	2,681	2,658	2,860	2,833	3,290	3,262
Tasmania ..	379	365	349	334	411	407	336	333	282	250
Northern Terr. (a)	145	145	156	151	686	677	522	517	492	479
Aust. Cap. Terr.	92	91	133	133	114	114	109	108	80	80
Total ..	56,408	53,929	58,150	55,246	61,782	61,397	62,308	61,808	64,852	64,450

(a) Year ended 30th June following.

Under the heading "drunkenness" are included cases of ordinary drunkenness, drunkenness and disorderliness, and habitual drunkenness.

The number of convictions is, as might naturally be expected, almost identical with the number of cases. Until 1939 the number of convictions recorded for New South Wales did not include cases where offenders were admonished and discharged.

(ii) *Convictions per 10,000 of Population.* The convictions for drunkenness per 10,000 of the population during each of the years from 1937 to 1941 are given hereunder:—

CONVICTIONS FOR DRUNKENNESS PER 10,000 OF THE POPULATION.

State or Territory.		1937.	1938.	1939.	1940.	1941.
New South Wales	..	102.6	100.0	117.9	124.5	123.7
Victoria ..	..	55.5	59.6	60.7	60.1	61.4
Queensland(a) ..	..	102.3	111.1	109.2	91.5	96.9
South Australia ..	..	42.8	44.8	43.6	43.1	63.6
Western Australia	..	58.9	53.9	57.2	60.5	69.7
Tasmania ..	..	15.6	14.2	17.1	14.0	10.4
Australian Capital Territory	..	89.3	119.6	95.1	84.7	61.2
Total ..	..	78.9	80.1	88.2	87.8	90.8

(a) Year ended 30th June following.

In the twenties the convictions for drunkenness averaged approximately 100 per 10,000 inhabitants, but the rate fell away considerably during the following years and was only 57.1 in 1931. With the improvement in the social condition of the people following that year, the average rose steadily to 84.0 in 1936, declined somewhat during the next two years, and rose to 90.8 in 1941. Figures for the consumption of beer have followed a similar course. From an average of 11.33 gallons per head of the population consumed for some years prior to 1931-32, when the amount declined to 7.32 gallons, the average rose each year to 13.76 gallons in 1941-42, but declined in 1942-43 to 12.58 gallons.

The convictions for drunkenness taken by themselves are not altogether a satisfactory test of the relative sobriety of the inhabitants of each State, inasmuch as several important factors must be taken into consideration. The age and sex constitution of the people, for example, are by no means identical in all the States. Another factor

is the distribution of the population. Arrest or summons for drunkenness obviously is more likely in the regions densely populated than in those sparsely populated. In addition allowance must be made for the attitude of the magistracy, the police and the general public in regard to the offence. Due account also must be taken of the effect of legislation dealing with the limitation of hours during which liquor may be sold in hotels.

(iii) *Consumption of Intoxicants.* The following table shows the consumption of spirits, wine and beer per head of the population in Australia during each year of the quinquennium 1938-39 to 1942-43 :—

#### CONSUMPTION OF INTOXICANTS IN AUSTRALIA.

				Consumption per Head of Population.		
Year.				Spirits.	Wine.	Beer.
				Imp. Galls.	Imp. Galls.	Imp. Galls.
1938-39	..	..	..	0.22	} 0.36	12.13
1939-40	..	..	..	0.26		12.89
1940-41	..	..	..	0.22		13.71
1941-42	..	..	..	0.20		13.76
1942-43	..	..	..	0.22		12.58

(iv) *Treatment of Drunkenness.* (a) *General.* Though the problem of the correct method of dealing with dipsomania is by no means an easy one, it seems fairly clear that the present plan of bringing offenders before magistrates, and subjecting them to the penalty of imprisonment or fine, has little deterrent effect, as the same offenders are constantly reappearing before the courts. Examination of the prison records in New South Wales some years ago disclosed the fact that over 40 per cent. of the gaol population had commenced their criminal career with a charge of drunkenness. During the last few years the dangers of moral contamination in this way have been more accurately appreciated, and a system of classification of prisoners has been adopted whereby the petty offender is as far as possible kept from association with those convicted of more serious offences.

(b) *Remedial.* Legislation has been passed in each State providing for the commitment of inebriates to special Government institutions. The laws in the various States are as follows:—New South Wales, Inebriates Act 1912; Victoria, Inebriates Act 1928; Queensland, Inebriate Institutions Act 1896; South Australia, Inebriates Act 1908-1934, Convicted Inebriates Act 1913-1934; Western Australia, Inebriates Act 1912-1919; Tasmania, Inebriates Act 1885, Inebriate Hospitals Act 1892. Curative work was first undertaken by the Government of New South Wales in 1907. In most cases the institutes are connected with the gaols, and, naturally, custodial measures are still a strong feature in their management; nevertheless, the results of remedial measures have been encouraging.

9. *First Offenders.*—In all the States statutes dealing with first offenders have been in force for many years. Existing legislation is as follows:—New South Wales, Crimes Act 1900 amended in 1924 and 1929, First Offenders (Women) Act 1919; Victoria, Crimes Act 1928; Queensland, Criminal Code Acts 1899 to 1939; South Australia, Offenders Probation Act 1913-1934; Western Australia, Criminal Code Act 1913-1942; Tasmania, Probation of Offenders Act 1934. The method of procedure is practically the same in all cases, i.e., with regard to most first offenders the magistrate or judge is empowered to allow the offender to go free on recognizances being entered into for his good behaviour for a certain period. In practice, this humane law has been found to work excellently, very few of those convicted under it having been found to relapse into crime.

10. *Children's Courts.*—Special courts for the trial of juvenile offenders have been established in New South Wales, Victoria, Queensland, Western Australia and Tasmania, while Children's Courts, although not under that title, are provided for by the Maintenance Act of 1926-1941 in South Australia. The object of these courts is to avoid, as far as possible, the unpleasant surroundings of the ordinary police court.

## § 2. Superior Courts.

1. Convictions at Superior Courts.—The following is a list of the principal offences for which persons were convicted in superior courts during 1941 :—

## CONVICTIONS AT SUPERIOR COURTS, 1941.

Offence.	N.S.W. (a)	Vic.	Qld. (a)	S.A.	W.A.	Tas.	N.T. (a)	A.C.T.	Aust.
<b>I. OFFENCES AGAINST THE PERSON.</b>									
Murder .. .. .	4	1	4	1	..	..	..	..	10
Attempted Murder .. .. .	1	..	..	..	..	..	3	..	4
Manslaughter .. .. .	9	3	4	..	2	1	..	..	19
Rape .. .. .	9	5	6	1	3	4	..	..	28
Other Offences against Females ..	70	46	24	43	7	1	1	..	192
Unnatural Offences .. .. .	50	36	7	6	..	1	..	..	100
Abortion and Attempts to Procure ..	3	2	1	2	1	..	..	..	9
Bigamy .. .. .	19	21	7	4	3	1	..	..	55
Suicide, Attempted .. .. .	..	..	..	..	..	..	..	..	..
Assault, Aggravated .. .. .	..	..	13	..	2	1	..	..	16
Assault, Common .. .. .	10	9	3	7	..	..	..	1	30
Other Offences against the Person ..	73	23	5	11	8	..	2	1	123
Total .. .. .	248	146	74	75	26	9	6	2	586
<b>II. OFFENCES AGAINST PROPERTY.</b>									
Burglary and Housebreaking .. ..	343	252	39	33	15	6	9	..	697
Robbery and Stealing from the Person .. .. .	62	25	2	1	1	3	6	..	100
Horse-stealing .. .. .	1	..	..	..	..	..	..	..	1
Cattle-stealing .. .. .	1	3	..	..	..	..	..	..	4
Sheep-stealing .. .. .	..	5	..	1	1	..	..	..	7
Embezzlement and Stealing by Servants .. .. .	13	23	7	3	4	..	..	..	50
Larceny, Other .. .. .	84	129	13	10	10	2	..	1	249
Unlawfully using Horses, Cattle and Vehicles .. .. .	..	..	1	..	5	..	..	..	6
Receiving .. .. .	16	45	3	2	..	2	..	..	68
Fraud and False Pretences .. .. .	38	21	7	19	1	..	..	..	86
Arson .. .. .	..	3	1	2	..	1	..	..	7
Malicious Damage .. .. .	5	6	..	2	..	..	..	..	13
Other Offences against Property ..	13	6	..	1	..	1	5	..	26
Total .. .. .	576	518	73	74	37	15	20	1	1,314
<b>III. FORGERY AND OFFENCES AGAINST THE CURRENCY.</b>									
Forgery and Uttering Forged Instruments .. .. .	15	16	2	14	..	..	..	..	47
Offences in relation to the Currency ..	1	..	..	..	..	..	..	..	1
Total .. .. .	16	16	2	14	..	..	..	..	48
<b>IV. OFFENCES AGAINST GOOD ORDER</b>									
	13	1	1	4	1	..	..	..	20
<b>V. OTHER MISCELLANEOUS.</b>									
Conspiracy .. .. .	22	7	..	..	..	..	..	..	29
Perjury and Subornation .. .. .	7	8	..	2	..	1	..	..	18
Other Offences .. .. .	4	9	1	8	1	3	..	..	26
Total .. .. .	33	24	1	10	1	4	..	..	73
Grand Total .. .. .	886	705	151	177	65	28	26	3	2,041

(a) Year ended 30th June, 1942.



The number of convictions at superior courts and the rate per 10,000 of the population are given below for each of the years 1937 to 1941 :—

### CONVICTIONS AT SUPERIOR COURTS.

State or Territory.	1937.	1938.	1939.	1940.	1941.
NUMBER.					
New South Wales(a) ..	695	804	982	861	886
Victoria .. ..	565	642	690	651	705
Queensland(a) ..	173	142	214	145	151
South Australia ..	183	172	179	163	177
Western Australia ..	103	90	71	84	65
Tasmania .. ..	42	55	39	59	28
Northern Territory(a) ..	14	23	11	36	26
Australian Capital Territory	1	4	14	4	3
Total .. ..	1,776	1,932	2,200	2,003	2,041

### PER 10,000 OF THE POPULATION.

New South Wales(a) ..	2.6	2.9	3.6	3.1	3.2
Victoria .. ..	3.0	3.4	3.7	3.4	3.6
Queensland(a) ..	1.7	1.4	2.1	1.4	1.5
South Australia ..	3.1	2.9	3.0	2.7	2.9
Western Australia ..	2.3	2.0	1.5	1.8	1.4
Tasmania .. ..	1.8	2.3	1.6	2.5	1.2
Northern Territory(a) ..	24.2	39.3	15.6	38.2	26.7
Australian Capital Territory	1.0	3.6	11.7	3.1	2.3
Total .. ..	2.6	2.8	3.1	2.8	2.9

(a) Year ended 30th June following.

The rate of convictions, 2.3 per 10,000 of the population, in 1936 was the lowest on record, but it increased during each of the next three years to 3.1 in 1939 and fell slightly to 2.9 in 1941. Owing to the smallness of the population and the particular conditions prevailing there, the rates for the Territories naturally show considerable variation.

2. **Habitual Offenders.**—Some account of the methods adopted in each State in connexion with habitual offenders is given in preceding issues of the Official Year Book (see No. 22, pp. 469–70).

3. **Capital Punishment.**—There were five executions in Australia during the period 1937 to 1941. Two took place in New South Wales (one in 1937–38 and one in 1939–40) and three in Victoria (two in 1939 and one in 1941).

Under the Criminal Code Amendment Act of 1922 capital punishment was abolished in Queensland.

In the early days of the history of Australia the penalty of death was attached to a large number of offences, many of which at the present time would be dealt with in the lower or magistrates' court. With the growth of settlement, and the general amelioration in social and moral conditions, the list was, however, considerably curtailed, and the existing tendency is practically to restrict death sentences to cases of murder. It may be stated that in cases of rape, which is a capital offence in some of the Australian States,

the penalty has been but sparingly inflicted during the last few years. Juries are reputed to be loth to convict on this charge, owing to the uncertainty whether sentence of death will be pronounced.

The average annual number of executions in Australia from 1861 to 1880 was 9, from 1881 to 1900, 6; from 1901 to 1910, 4; from 1911 to 1920, 2; from 1921 to 1930, 2; and from 1931 to 1940, 1.

### § 3. Civil Courts.

1. Lower Courts.—The total number of plaints entered and the amounts awarded to plaintiffs during 1941 are given in the following table. Particulars for earlier years appear in preceding issues of the Official Year Book.

#### CIVIL CASES AT LOWER COURTS, 1941.

State.	1941.	State or Territory.	1941.
New South Wales	{ Cases No. 57,520 Amount £ 337,983	Western Australia	{ Cases No. 21,307 Amount £ 108,797
Victoria..	{ Cases No. 73,013 Amount £ 431,948	Tasmania	{ Cases No. 14,936 Amount £ 59,506
Queensland(a)	{ Cases No. 11,602 Amount £ 135,317	Australian Capital Territory	{ Cases No. 485 Amount £ 3,569
South Australia	{ Cases No. 20,793 Amount £ 125,000	Total	{ Cases No. 199,656 Amount £ 1,202,120

(a) Year ended 30th June, 1942.

Particulars in regard to the amount of judgments involved in the 530 civil cases in the Northern Territory during the year ended 30th June, 1942, are not available.

The figures just given represent the returns from the Small Debts Courts in New South Wales, the Petty Sessions Courts in Victoria, the Petty Debts Courts in Queensland, the Local Courts of South Australia and Western Australia, the Courts of Requests in Tasmania, and the Court of Petty Sessions in the Australian Capital Territory.

2. Superior Courts.—In the next table will be found the transactions on the civil side in the Superior Courts during 1941. The particulars given below include the number and amount of judgments entered by default or consent, and differ from those in issues of the Official Year Book prior to No. 29, which related in most States only to cases actually tried during the year.

The New South Wales returns refer to judgments in the District Courts only, and exclude 1,522 judgments signed in the Supreme Court, for which the amounts entered are not available.

#### CIVIL CASES AT SUPERIOR COURTS, 1941.

State.	1941.	State or Territory.	1941.
New South Wales	{ Causes No. 5,762 Amount £ 299,032	Western Australia	{ Causes No. 103 Amount £ 144,840
Victoria..	{ Causes No. 2,234 Amount £ 150,297	(b)	
Queensland(a)	{ Causes No. 489 Amount £ 58,114	Tasmania	{ Causes No. 312 Amount £ 32,395
South Australia	{ Causes No. 392 Amount £ 14,987	Australian Capital Territory	{ Causes No. 2 Amount £ 1,089
		Total	{ Causes No. 9,294 Amount £ 700,754

(a) Year ended 30th June, 1942.

(b) Judgments signed and entered.

3. Divorces and Judicial Separations.—The following table shows the number of petitions for divorce filed in each State during 1941, and the number of divorces granted :—

PETITIONS FOR DIVORCE AND DIVORCES GRANTED, 1941.

State or Territory.	Petitions for Divorce.			Divorces Granted.
	By Husband.	By Wife.	Total.	
New South Wales .. ..	1,185	1,192	2,377	1,501
Victoria .. ..	438	543	981	837
Queensland .. ..	132	126	258	253
South Australia .. ..	187	200	387	273
Western Australia .. ..	169	192	361	292
Tasmania .. ..	48	51	99	84
Northern Territory (a) ..	3	1	4	4
Australian Capital Territory ..	3	..	3	2
Total .. ..	2,165	2,305	4,470	3,246

(a) Year ended 30th June, 1942.

The grounds on which divorces and judicial separations were granted during 1941 in each State are given in the following table :—

GROUND ON WHICH DIVORCES AND JUDICIAL SEPARATIONS WERE GRANTED, 1941.

Grounds on which Granted.	N.S.W.		Vic.		Qld.		S.A.		W.A.		Tas.		N.T. (a)		A.C.T.		Aust.	
	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.
Adultery .. ..	328	8	215	2	109	1	94	1	130	..	18	..	..	..	1	..	895	12
Bigamy .. ..	5	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	7	..
Cruelty .. ..	8	2	1	1	2	1	7	..	..	..	1	..	..	..	..	..	19	4
Cruelty and Drunkenness ..	17	..	7	..	..	..	..	..	..	..	..	..	..	..	..	..	24	..
Drunkenness .. ..	9	..	1	..	..	..	7	..	1	..	1	..	..	..	..	..	19	..
Desertion .. ..	1,130	..	594	2	133	..	135	..	140	..	61	..	4	..	1	..	2,198	2
Imprisonment for Crime .. ..	..	..	4	..	..	..	2	..	1	..	1	..	..	..	..	..	9	..
Insanity .. ..	..	..	11	..	3	..	2	..	3	..	2	..	..	..	..	..	21	..
Other .. ..	4	..	3	..	5	..	25	..	17	..	..	..	..	..	..	..	54	..
Total .. ..	1,501	10	837	5	253	2	273	1	292	..	84	..	4	..	2	..	3,246	18

(a) Year ended 30th June, 1942.

The number of divorces and judicial separations in each State during the period 1937 to 1941 is shown below. The figures refer in the case of divorces to decrees made absolute in each year and include decrees for nullity of marriage.

DIVORCES AND JUDICIAL SEPARATIONS.

State or Territory.	1937.		1938.		1939.		1940.		1941.	
	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.
New South Wales .. ..	1,272	11	1,431	9	1,545	8	1,414	13	1,501	10
Victoria .. ..	797	3	827	3	801	4	821	1	837	5
Queensland .. ..	210	..	201	..	224	..	240	(a) 1	253	2
South Australia .. ..	207	3	243	1	243	..	309	5	273	1
Western Australia .. ..	236	..	255	..	234	..	246	..	292	..
Tasmania .. ..	30	..	109	..	80	..	83	..	84	..
Northern Territory (a) ..	4	..	4	..	2	..	6	..	4	..
Australian Capital Territory ..	3	..	4	..	6	1	5	1	2	..
Total .. ..	2,759	17	3,074	13	3,135	13	3,126	21	3,246	18

(a) Year ended 30th June following.



The average annual number of divorces and judicial separations in Australia for decennial periods from 1871 to 1940 were as follows:—

### DIVORCES AND JUDICIAL SEPARATIONS : AUSTRALIA.

Year ..	1871-80.	1881-90.	1891-1900.	1901-10.	1911-20.	1921-30.	1931-40.
Average ..	29.	70.	358.	401.	707.	1,699.	2,495.

The following table shows the numbers and proportions of divorced males and females according to age in Australia at each Census from 1891 onwards. Prior to 1911 no record was made of divorced persons in South Australia, so that no definite comparisons can be made to extend beyond that date.

### DIVORCED PERSONS : AGE DISTRIBUTION, AUSTRALIA, 1891 TO 1933.

Age last Birthday.	Number.					Proportion per 10,000 of the Sex.				
	1891. (a)	1901. (a)	1911.	1921.	1933.	1891. (a)	1901. (a)	1911.	1921.	1933.
MALES.										
Years—										
15-19 ..	..	..	2	11	..	..	..	0	0	..
20-24 ..	10	21	27	55	73	0	1	1	2	3
25-29 ..	37	77	137	321	501	2	5	7	14	18
30-34 ..	60	167	286	580	1,100	4	11	17	26	44
35-39 ..	68	262	321	661	1,575	7	17	21	34	69
40-44 ..	41	233	361	592	1,777	5	19	25	35	77
45-49 ..	34	154	407	533	1,614	5	17	30	37	77
50-54 ..	27	131	338	498	1,256	4	19	31	37	73
55-59 ..	28	76	204	425	877	6	14	28	36	66
60-64 ..	16	55	134	281	611	4	12	26	31	53
65-69 ..	5	33	76	155	477	2	9	19	28	51
70-74 ..	5	14	43	86	270	3	5	14	26	41
75-79 ..	1	7	12	27	122	1	5	6	14	34
80-84 ..	..	3	14	7	35	..	5	16	7	25
85 and over ..	..	1	6	1	10	..	5	17	2	17
Age 15 and over	332	1,234	2,368	4,233	10,298	3	10	15	23	42
FEMALES.										
Years—										
15-19 ..	2	2	1	8	6	0	0	0	0	0
20-24 ..	16	56	71	168	230	1	3	3	7	8
25-29 ..	60	168	239	526	960	4	11	13	22	37
30-34 ..	49	244	332	756	1,565	5	18	21	34	66
35-39 ..	40	287	374	713	1,939	5	24	26	37	82
40-44 ..	26	178	366	621	1,880	4	19	29	38	83
45-49 ..	19	107	319	496	1,598	4	16	29	37	80
50-54 ..	10	52	229	405	1,066	2	10	27	34	65
55-59 ..	4	28	79	280	662	1	6	14	28	51
60-64 ..	1	11	59	217	485	0	3	13	28	42
65-69 ..	..	10	38	70	287	..	3	10	14	32
70-74 ..	1	5	14	25	136	1	3	5	8	21
75-79 ..	..	..	16	14	58	..	..	10	7	16
80-84 ..	..	1	2	2	12	..	2	3	2	8
85 and over ..	..	..	1	3	4	..	..	3	5	5
Age 15 and over	228	1,149	2,140	4,304	10,888	3	10	15	24	46

(a) Excludes South Australia.

4. **Bankruptcies.**—Particulars relating to bankruptcy in each State up to the end of 1927 were incorporated under this heading in preceding issues of the Official Year Book. Under the terms of the Bankruptcy Act 1924-1933 jurisdiction in bankruptcy and insolvency was taken over by the Commonwealth from 1st August, 1928. The Act

makes provision for the declaration of districts, and each State (except Queensland and Northern Territory) have been declared bankruptcy districts. The bankruptcy district of New South Wales includes the Australian Capital Territory. Queensland has been divided into three districts corresponding to the three Supreme Court districts in that State. Operations under the Act for the year ended 31st July, 1943, are given in the following table. For the purposes of comparison, figures for each of the preceding two years are appended to the table.

## COMMONWEALTH BANKRUPTCY ACT RETURNS, 1942-1943.

Heading.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Australia.
Sequestration Orders and Orders for Administration of Deceased Debtors' Estates	Number .. 129 Liabilities £ 323,328 Assets £ 237,458	73 75,344 25,272	50 69,364 46,404	23 34,069 11,710	15 40,065 20,134	18 14,029 1,946	..	308 556,199 342,924
Compositions, etc., after Bankruptcy	Number .. 4 Liabilities £ 5,784 Assets £ 2,838	.. .. ..	1 494 329	5 10,743 7,169	.. .. ..	.. .. ..	..	10 17,021 10,336
Compositions, etc., without Bankruptcy	Number .. 1 Liabilities £ 1,382 Assets £ 1,638	.. .. ..	2 6,374 8,671	84 259,089 227,544	9 26,980 24,586	.. .. ..	..	96 293,825 262,439
Deeds of Arrangement ..	Number .. 31 Liabilities £ 49,767 Assets £ 54,525	18 21,225 14,604	12 13,087 10,957	.. .. ..	.. .. ..	.. .. ..	..	61 84,079 80,086
Total, 1942-43	Number .. 165 Liabilities £ 380,261 Assets £ 296,459	91 96,569 39,876	65 89,319 66,361	112 303,901 246,423	24 67,045 44,720	18 14,029 1,946	..	475 951,124 695,785
Total, 1941-42	Number .. 323 Liabilities £ 389,365 Assets £ 280,167	215 254,186 101,506	123 207,841 161,102	244 787,743 614,476	48 200,211 137,131	30 18,716 9,240	..	983 1,858,062 1,303,622
Total, 1940-41	Number .. 503 Liabilities £ 1,055,592 Assets £ 534,224	313 303,056 137,369	172 339,838 190,590	331 884,911 679,070	94 145,673 107,497	56 35,861 13,217	..	1,469 2,764,931 1,661,967

It is pointed out that the procedure in certain States has been largely influenced by the procedure in force prior to the passing of the Commonwealth Act, and that, therefore, no particular significance attaches to the large number of compositions, etc., in South Australia and Western Australia.

The Bankruptcy Act 1930 created a Federal Court of Bankruptcy and provided for the appointment of a Judge or two Judges thereto. In 1930 a Federal Judge in Bankruptcy was appointed in addition to the State Judges, to deal with bankruptcy work in New South Wales and Victoria, the Courts in these States having been unable to cope with the business. All the bankruptcy cases in these States are now heard by the Federal Judge, who sits in Sydney and Melbourne alternatively.

5. High Court of Australia.—Under the provisions of Section 71 of the Commonwealth Constitution, the judicial power of the Commonwealth is vested in a Federal Supreme Court, called the High Court of Australia, and in such other courts as the Parliament creates or invests with federal jurisdiction. The Federal High Court possesses both original and appellate jurisdiction. The powers of the Court are defined in the Commonwealth Constitution, and in the Judiciary Act 1903-1940. At present the Court consists of a Chief Justice and five other judges. Sittings of the Court are held in the capitals of the various States as occasion may require. The High Court functions as a Court of Appeal for Australia. The following statement shows the transactions of the High Court for 1941 and 1942. Figures for previous years are given in preceding issues.

## TRANSACTIONS OF COMMONWEALTH HIGH COURT, 1941 AND 1942.

Original Jurisdiction.	1941.	1942.	Appellate Jurisdiction.	1941.	1942.
Number of writs issued	35	74	Number of appeals set down for hearing ..	97	66
Number of causes entered for trial ..	10	21	Number allowed ..	29	15
Verdicts for plaintiffs	3	7	Number dismissed ..	59	27
Verdicts for defendants	..	16	Otherwise disposed of	5	10
Otherwise disposed of	4	27			
Amount of judgments	£100	£16,970			

During 1941 and 1942 respectively the Court dealt also with the following : Appeals from Assessments under Taxation Assessment Act, 45, 26 ; Special cases stated for the opinion of the Full Court, 6, 14 ; Applications for Prohibitions, etc., 42, 35. The fees collected amounted to £691 in 1941 and £750 in 1942.

6. **Commonwealth Court of Conciliation and Arbitration.**—A detailed statement regarding the operation of this Court, which was established under the Commonwealth Conciliation and Arbitration Act of 1904-1934, will be found in Chapter XV. "Labour, Wages and Prices", and in the *Labour Report*.

## § 4. Police and Prisons.

1. **General.**—Early issues of the Official Year Book (see No. 4, p. 918) contain a résumé of the evolution of the police force in Australia up to the passing of the Police Act of 1862 (25 Vic. No. 16) in New South Wales.

2. **Strength of Police Force.**—(i) *General.* The strength of the police force in each State during the five years ended 1941 is given in the table hereunder. It may be mentioned that the police forces (with the exception of the small body of Commonwealth police maintained in the Northern Territory and in the Australian Capital Territory) are entirely under State control, but, by arrangement, the Commonwealth Government utilizes their services in various directions, such as acting as aliens registration officers, and policing the liquid fuel regulations, etc.

## STRENGTH OF POLICE FORCES.

State or Territory.	Area of State in Sq. Miles.	No. of Police.				
		1937.	1938.	1939.	1940.	1941.
New South Wales ..	309,433	3,816	3,801	3,907	3,964	3,902
Victoria ..	87,884	2,280	2,279	2,333	2,327	2,335
Queensland (a) ..	670,500	1,390	1,395	1,460	1,510	1,621
South Australia (a)	380,070	882	894	905	928	879
Western Australia (a)	975,920	582	601	600	614	638
Tasmania (a) ..	26,215	283	284	296	297	311
Northern Territory(a)	523,620	43	43	48	51	43
Aust. Cap. Territory	939	15	17	17	19	19
Total ..	2,974,581	9,291	9,314	9,566	9,710	9,748

(a) 30th June of year following.



The figures for New South Wales for 1941 exclude 17 "black trackers", (i.e., natives employed in detection of offenders chiefly in outlying districts) and 4 matrons, while the Victorian returns exclude 3 matrons and 1 black tracker. For Queensland the figures exclude 34 black trackers, for South Australia 4 wardresses and 3 black trackers, for Western Australia 37 black trackers and 5 female searchers, and for the Northern Territory 31 black trackers. Women police are employed in all the States, the respective numbers for 1941 included in the table above being :—New South Wales 14, Victoria 8, Queensland 8, South Australia 14, Western Australia 10, and Tasmania 2. Their work is mainly preventive, and the importance and usefulness of their duties have been referred to in very high terms by the Chief Officers of Police. In his Report for 1939 the Inspector-General of Police in New South Wales refers to the valuable work performed by the women police in connexion with the welfare of women and young girls who frequent the streets and places of public resort, and the location of missing girls. They also carry out escort duties in respect of female prisoners. The experience in other States has been of a similar nature.

(ii) *Proportion to Population*.—The average number of persons in the various States to each police officer during the same period is shown in the following table. In considering these figures allowance must, of course, be made for the unequal area and unequal distribution of the population of the various States.

#### POLICE FORCES IN RELATION TO POPULATION.

State or Territory.	Number of Persons per Sq. Mile, 1933 Census.	Persons to each Police Officer.				
		1937.	1938.	1939.	1940.	1941.
New South Wales .. ..	8.41	710	720	709	704	721
Victoria .. ..	20.71	816	822	809	825	836
Queensland (a) .. ..	1.41	722	729	703	686	640
South Australia (a) .. ..	1.53	672	666	661	646	691
Western Australia (a) .. ..	0.45	791	774	780	764	737
Tasmania (a) .. ..	8.68	827	833	808	804	771
Northern Territory (a) .. ..	0.01	134	144	165	195	208
Aust. Cap. Territory .. ..	9.52	683	674	721	677	651
<b>Total .. ..</b>	<b>2.23</b>	<b>740</b>	<b>744</b>	<b>731</b>	<b>729</b>	<b>733</b>

(a) 30th June of year following.

3. *Duties of the Police*.—In addition to the ordinary employment attaching to their office, the police are called upon to perform many duties which in other countries are carried out by various functionaries. Thus, in New South Wales, it has been estimated that one-fifth of the time of the force was taken up in extraneous duties unconnected with the protection of life and property, while the cash value of the services rendered to other Government departments was stated as over £200,000 per annum. The Queensland Commissioner refers to the circumstance that in 1941-42 no less than 54 important subsidiary offices were held by the police. In South Australia, the Commissioner alludes to the large number of subsidiary duties performed by police officers, and mentions that for the year ended June, 1942, over 215,500 inquiries were made on behalf of other State and Commonwealth departments. As a result of the war extra duties have been added to those normally performed by the police. These include, amongst others, registration of aliens and various duties connected with air raid precautions.

4. **Prison Accommodation and Prisoners, 1941.**—The table below shows the number of prisons in each State, the accommodation therein, and the number of prisoners in confinement at the end of 1941 :—

**PRISON ACCOMMODATION AND PRISONERS, 1941.**

State or Territory.	Number of Prisons.	Accommodation in—		Prisoners at End of Year.
		Separate Cells.	Wards.	
New South Wales (a) .. ..	15	(b) 2,059	..	1,497
Victoria .. ..	10	1,292	338	939
Queensland .. ..	7	564	94	277
South Australia .. ..	15	672	171	208
Western Australia .. ..	19	607	506	211
Tasmania (a) .. ..	1	142	4	62
Northern Territory .. ..	3	13	19	32
Total .. ..	70	5,349	1,132	3,226

(a) Year ended 30th June, 1942.

(b) Total accommodation.

The figures refer to prisoners under sentence and exclude aborigines. There are no gaols in the Australian Capital Territory, but there are lock-ups attached to the police stations at Canberra and Jervis Bay, where offenders are held while awaiting trial, and sentences not exceeding one week imposed by a magistrate may be served.

5. **Prisoners in Gaol, 1937 to 1941.**—The number of prisoners in gaol at 31st December in each of the years 1937 to 1941 and the proportion per 10,000 of the population are given in the following table. The figures refer to prisoners under sentence and exclude aborigines.

**PRISONERS IN GAOL.**

State or Territory.	1937.	1938.	1939.	1940.	1941.
NUMBER.					
New South Wales(a) ..	1,176	1,364	1,357	1,236	1,497
Victoria .. ..	1,030	1,084	1,144	1,046	939
Queensland .. ..	276	265	261	271	277
South Australia .. ..	231	235	199	197	208
Western Australia .. ..	260	294	234	246	211
Tasmania(a) .. ..	87	116	108	91	62
Northern Territory .. ..	18	17	23	39	32
Total .. ..	3,078	3,375	3,326	3,126	3,226
PER 10,000 OF THE POPULATION.					
New South Wales(a) ..	4.3	5.0	4.9	4.4	5.3
Victoria .. ..	5.5	5.8	6.1	5.5	4.8
Queensland .. ..	2.8	2.6	2.6	2.6	2.7
South Australia .. ..	3.9	3.9	3.3	3.3	3.4
Western Australia .. ..	5.7	6.4	5.0	5.3	4.5
Tasmania(a) .. ..	3.6	4.9	4.5	3.7	2.6
Total .. ..	4.5	4.9	4.8	4.4	4.5

(a) 30th June of year following.

After remaining stationary at 6.5 per 10,000 for the four years ended 1932 the proportion of prisoners in gaol to the total population declined to 4.5 in 1941, which figure compares most favourably with that obtaining in 1891, when the proportion was as high as 16 per 10,000. Rates for the Northern Territory have not been included on account of the abnormal conditions prevailing there.

6. **Improvement in Prison Methods.**—In previous issues of the Official Year Book a fairly detailed account is given of the improvements effected in each State during recent years in regard to methods of prison management (see Official Year Book No. 22, pp. 471-4), but this information is not repeated in the present volume.

### § 5. Cost of Administration of Justice.

1. **Expenditure by the States.**—The table below shows the expenditure from Consolidated Revenue during 1941-42 in connexion with the administration of justice in each of the States.

It is difficult to obtain comparable figures of the total costs of the various services under this heading, and net costs have been substituted for gross expenditure. It will be noted that in South Australia and Western Australia the receipts for legal fees and registrations exceed the actual expenditure under "Justice".

#### NET EXPENDITURE ON JUSTICE, 1941-42.

State.	Net Expenditure.			Per Head of Population.		
	Justice.	Police.	Prisons.	Justice.	Police.	Prisons.
	£	£	£	s. d.	s. d.	s. d.
New South Wales ..	201,931	1,428,313	214,040	1 5	10 2	1 6
Victoria ..	135,029	855,573	121,912	1 5	8 9	1 3
Queensland ..	89,100	663,624	39,920	1 9	12 10	0 9
South Australia ..	-29,385	317,107	34,752	-1 0	10 6	1 2
Western Australia ..	-16,643	251,836	31,123	-0 9	10 9	1 4
Tasmania ..	22,813	118,663	15,287	1 11	9 11	1 3
Total ..	402,845	3,635,116	457,034	1 2	10 3	1 3

2. **Commonwealth Expenditure.**—The expenditure shown in the foregoing table is that incurred by the State Governments only, and does not include expenditure of the Commonwealth Attorney-General's Department, which is given hereunder for the years 1938-39 to 1942-43:—

#### EXPENDITURE OF THE COMMONWEALTH ATTORNEY-GENERAL'S DEPARTMENT.

Year.				Gross Expenditure.	Receipts.	Net Expenditure.
				£	£	£
1938-39 .. ..	..	..	..	281,497	111,036	170,461
1939-40 .. ..	..	..	..	276,557	107,680	168,877
1940-41 .. ..	..	..	..	297,400	99,898	197,502
1941-42 .. ..	..	..	..	319,171	90,820	228,351
1942-43 .. ..	..	..	..	351,452	103,919	247,533

The totals for each year include expenditure in connexion with patents and copyright which amounted in 1942-43 to £48,809. As pointed out previously, the Commonwealth took over jurisdiction in bankruptcy in August, 1928, and the expenditure thereon in 1942-43 amounted to £43,991, including the salary of the Federal Judges, £4,125. Expenditure in connexion with the Australian Capital Territory police amounted in 1942-43 to £10,497, and £3,832 was expended on miscellaneous items including the Law Court, Titles Office and Industrial Arbitration Board. Revenue of the Attorney-General's Department amounted for the year to £103,919, comprising £58,075 for patents, copyright, trademarks and designs, £23,500 for bankruptcy and £22,344 miscellaneous including fees and fines.

In addition to the foregoing a sum of approximately £34,655 was expended in the Northern Territory during 1942-43 by the Department of the Interior on the administration of justice including the costs of the police force and prisons.



## CHAPTER VIII.

## PUBLIC BENEVOLENCE.

## § 1. Introductory.

Charity and charitable effort in Australia may be classified under three headings: (a) State; (b) public; and (c) private. To the first belong all institutions wholly provided for by the State, such as the principal hospitals for the insane in the various States, the Government and leased hospitals in Western Australia, and the Government asylums for the infirm in New South Wales. The other classes comprise public institutions of two kinds, namely:—(i) those partially subsidized by the State or by State endowments for maintenance, but receiving also private aid, and (ii) those wholly dependent upon private aid. To the former division belong such institutions as the principal metropolitan hospitals. In the latter are included institutions established and endowed by individuals for the benefit of the needy generally. All charitable movements of a private character are included in the third group. A more or less accurate statistical account is possible in classes (a) and (b), but in regard to (c) complete tabulation is, for obvious reasons, impossible. Owing to differences in the method and date of collection and tabulation it is impossible to bring statistics of charitable institutions to a common year. In general, there is considerable lack of harmony in the statistical information available for the different States.

No poor-rate is levied in Australia. Reference to old-age pensions, invalid pensions, maternity allowances, child endowment and widows' pensions, which are provided by the Commonwealth Government, will be found in the Chapter XVII., "Public Finance".

From time to time relief funds have been organized for famine-stricken countries in various parts of the world, or for places where plagues, flood, fire, or earthquake have shown the need of urgent relief. Special funds were also raised for persons disabled or bereaved through war. Complete statistical information in regard to these forms of charity is not, however, available. It may be mentioned that the daily Press frequently accepts the duty of collectorship in charity appeals. In regard to subscriptions to the various patriotic funds which were instituted in consequence of the War of 1914-19, the total for Australia was estimated to exceed £12,500,000.

## § 2. The Larger Charities of Australia.

1. *Public Hospitals (other than Hospitals for the Insane).*—(i) *General.* All the State capitals have several large and well-equipped hospitals, and there is at least one in every important town. In large centres there are hospitals for infectious diseases, tubercular patients, women, children, incurables, etc.

The particulars given herein refer to public hospitals at the latest available date and include all institutions affording hospital relief, whether general or special, with the exception of the hospitals for the insane and private hospitals conducted commercially. It is considered that the extension of the scope of these statistics to embrace both general and special institutions will afford a better comparison as between the various States than the statistics previously issued relating to general hospitals only. The particulars for New South Wales in the following tables relate to hospitals operating under the control of the Hospitals Commission.

(ii) *Principal Hospitals in each State.* In earlier issues of the Official Year Book (see No. 22, pp. 481-2) particulars respecting staff, accommodation, etc., of each of the principal hospitals were given.

(iii) *Number, Staff and Accommodation, 1941-42.* Details regarding the number of hospitals, staffs and accommodation for the year 1941-42, or nearest available year, are given in the following table:—

**PUBLIC HOSPITALS : NUMBER, STAFF AND ACCOMMODATION, 1941-42.**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust. (a)	W. Aust.	Tas.	Total.
Number of Hospitals ..	213	75	115	56	85	22	566
Medical Staff—							
Honorary .. ..	1,618	867	126	238	84	90	3,023
Salaried .. ..	409	259	194	70	28	52	1,012
Total .. ..	2,027	1,126	320	(b) 308	112	142	4,035
Nursing Staff .. ..	5,869	3,600	3,038	(b) 1,178	1,188	489	15,362
Accommodation—							
Number of beds and cots	16,009	7,395	6,629	(b) 2,676	3,520	1,865	38,094

(a) Year ended 31st December, 1941.

(b) Excludes particulars of Lying-in Homes, Sanatoria and Convalescent Homes.

The figures for accommodation shown in the table above include, where available, a considerable number of beds and cots for certain classes of cases in out-door or verandah sleeping places.

(iv) *Patients Treated.* The table hereunder furnishes particulars respecting patients treated.

**PUBLIC HOSPITALS : PATIENTS TREATED, 1941-42,**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust. (a)	W. Aust.	Tas.	Total.
Indoor Relief—Inmates at beginning of year—							
Males .. ..	5,658	2,820	2,424	856	962	535	13,255
Females .. ..	5,850	3,196	2,256	857	850	560	13,569
Total .. ..	11,508	6,016	4,680	1,713	1,812	1,095	26,824
Admissions and Re-admissions during year—							
Males .. ..	114,658	39,188	61,164	18,670	24,586	12,576	270,842
Females .. ..	132,426	49,357	58,879	20,210	24,545	12,142	297,559
Total .. ..	247,084	88,545	120,043	38,880	49,131	24,718	568,401
Discharges—							
Males .. ..	109,111	36,228	58,487	17,394	23,230	12,059	256,509
Females .. ..	128,741	47,492	57,493	19,276	23,785	11,751	288,538
Total .. ..	237,852	83,720	115,980	36,670	47,015	23,810	545,047
Deaths—							
Males .. ..	5,741	3,208	2,681	1,266	1,317	496	14,709
Females .. ..	4,065	2,248	1,682	900	756	427	10,078
Total .. ..	9,806	5,456	4,363	2,166	2,073	923	24,787
Inmates at end of year—							
Males .. ..	5,464	2,572	2,420	866	1,001	556	12,879
Females .. ..	5,470	2,813	1,960	891	854	526	12,514
Total .. ..	10,934	5,385	4,380	1,757	1,855	1,082	25,393
Average Daily Number Resident .. ..	11,063	5,480	4,481	(b) 1,939	1,844	1,047	25,854

(a) Year ended 31st December, 1941.

(b) See footnote (b) to previous table.

(v) *Revenue and Expenditure.* The revenue and expenditure for the year 1941-42 were as follows:—

## PUBLIC HOSPITALS : REVENUE AND EXPENDITURE, 1941-42.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust. (a)	W. Aust.	Tas.	Total.
<b>Revenue—</b>	£	£	£	£	£	£	£
Government Aid ..	61,441,297	737,623	675,112	393,437	303,471	103,369	3,564,309
Municipal Aid ..	(c)	88,156	322,260	58,148	1,162	..	469,726
Public Subscriptions, Legacies, etc. ..	(d) 682,684	709,589	34,135	23,193	17,259	14,448	1,481,308
Fees ..	842,995	409,378	429,580	139,685	212,210	100,033	2,133,881
Other ..	(e) 637,182	(f) 227,855	119,975	6,830	8,979	7,265	1,008,086
<b>Total ..</b>	<b>3,604,158</b>	<b>2,172,601</b>	<b>1,581,062</b>	<b>531,293</b>	<b>543,081</b>	<b>225,115</b>	<b>8,657,310</b>
<b>Expenditure—</b>							
Salaries and Wages	1,519,322	647,375	641,731	239,725	274,765	107,985	3,430,903
Upkeep and Repair of Buildings and Grounds ..	123,655	34,370	29,995	27,582	5,958	5,346	226,906
All Other Ordinary Capital (g) ..	1,190,235	517,367	790,599	231,500	208,831	112,781	3,060,314
	(h)	501,527	178,470	44,332	42,305	..	(i) 766,634
<b>Total ..</b>	<b>2,842,212</b>	<b>1,730,639</b>	<b>1,640,795</b>	<b>543,139</b>	<b>531,859</b>	<b>226,113</b>	<b>7,514,757</b>

(a) Year ended 31st December, 1941. (b) Includes State aid for buildings, £93,520.  
(c) Included in "Other." (d) Includes legacies and bequests for capital purposes, £24,434.  
(e) Includes loans raised under Section 37 of the Public Hospitals Act, £534,957. (f) Includes loan receipts, £71,750. (g) Includes such items as Purchases of Land, Cost of New Buildings and Additions to Buildings. (h) Not available. (i) Incomplete.

(vi) *Summary for Five Years, 1936 to 1941-42.* Returns for the last five years of the number of hospitals in Australia, beds, admissions, indoor patients treated, deaths and expenditure are given in the following table. The figures relate to both general and special hospitals. It should be noted that the statistics for the States cannot be brought to a common year, and consequently the following particulars relate to a combination of calendar and financial years.

## PUBLIC HOSPITALS : AUSTRALIA.

Particulars.	1936.	1937.	1938.	1939.	1940.	1941-42.
Number of institutions	557	560	563	565	565	566
„ beds and cots ..	33,377	34,541	35,711	36,863	38,125	38,094
Admissions during year	481,727	511,648	527,055	550,062	583,820	568,401
Total indoor cases treated ..	504,521	535,342	552,051	576,027	610,053	595,225
Deaths ..	21,601	22,162	23,372	22,916	23,273	24,787
Expenditure	£ 5,134,247	5,965,484	6,351,955	6,775,078	7,160,016	7,514,757

In addition to those admitted to the institutions, there are large numbers of out-patients. In the last year there were 587,976 out-patients treated in New South Wales, 263,223 in Victoria, 255,095 in Queensland, 59,953 in South Australia, 57,816 in Western Australia and 117,132 in Tasmania.

2. *Benevolent and Destitute Asylums.*—(i) *General.* The public provision for the care of indigent old people has been a feature of the social development of recent years in most countries. Numerous establishments exist in Australia for the housing and protection of persons no longer able to provide for themselves. These institutions are supported by Government and municipal aid, public subscriptions, bequests, etc.; while in many cases relatives of poor and afflicted persons contribute to their maintenance.



An entirely satisfactory statistical tabulation in regard to all forms of charitable aid is especially difficult in the case of benevolent institutions, because the services provided by these institutions are not always identical. For example, in Western Australia, the Home for Destitute Women includes a maternity ward, for which statistics are not kept separately. Since the chief function of the institution is to help the destitute, it has been included amongst benevolent asylums. In Victoria, although several of the hospitals were formerly also benevolent asylums, a separation was effected and asylum patients were transferred to appropriate institutions.

(ii) *Principal Institutions.* Particulars respecting the accommodation and the number of inmates of the principal institutions were published in earlier issues of the Official Year Book (see No. 22, p. 485).

(iii) *Revenue and Expenditure.* Details regarding revenue and expenditure for the year 1941 are given in the following table :—

BENEVOLENT ASYLUMS : REVENUE AND EXPENDITURE, 1941.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£	£	£	£	£	£	£
Revenue—							
Government Aid	145,736	68,073	47,183	11,871	10,431	20,083	303,377
Municipal Aid ..	(b)	885	..	..	5	..	890
Public Subscriptions, Legacies	19,511	15,476	57,116	{ .. 6,568 4,734	3,342	396	262,980
Fees ..	54,271	56,156			19,442	8,464	
Other ..	5,387	10,021			141	1,955	
Total ..	224,905	150,611	104,299	23,173	33,361	30,898	567,247
Expenditure—							
Salaries and Wages ..	103,597	50,341	28,200	9,385	14,886	14,859	221,268
Upkeep and Repair of Buildings ..	4,295	3,722	11,429	1,280	687	1,401	22,814
All Other(c) ..	117,768	93,860	65,641	12,508	16,097	14,296	320,170
Total ..	225,660	147,923	105,270	23,173	31,670	30,556	564,252

(a) The figures relate to the years ended as follows :—New South Wales—31st December, 1941; Victoria, Queensland and Tasmania—30th June, 1941; South Australia—31st December, 1940; and Western Australia—30th June, 1940. (b) Included in "Other." (c) Includes £31,045 in Victoria and £938 in Western Australia, covering such items as Purchases of Land, Cost of New Buildings and Additions to Buildings.

3. *Orphanages, Industrial Schools, etc.*—(i) *General.* The methods of caring for orphans and neglected children differ extensively, inasmuch as some of the children are more or less segregated in orphanages and industrial schools, while others are boarded-out with their mothers or female relatives or with approved foster mothers. The children in orphanages and similar institutions may receive, in addition to primary education, some craft training. In all cases employment is found for the children on their discharge from the institution, and they remain for some time under the supervision of the proper authorities. The conditions under which orphans, neglected children and children boarded-out live, are subject to frequent inspections. Apart from the amounts shown in (iii) below the gross expenditure on orphanages, etc., in 1941 was approximately £400,000.

(ii) *Principal Institutions.* Particulars concerning the principal institutions in each State were published in earlier issues of the Official Year Book (see No. 22, p. 486).

(iii) *Transactions of State Departments.* The following table summarizes the transactions during 1941 of State Departments in connexion with children under their control or supervision. In addition to neglected children, the figures include uncontrollable and convicted children who are wards of a Government authority, as well as poor children whose parents obtain assistance from the Government without giving up the legal right of custody.

## CHILDREN UNDER GOVERNMENT AUTHORITY : SUMMARY, 1941.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<i>A. Children maintained or subsidized by the State.</i>	No.	No.	No.	No.	No.	No.	No.
In State shelters, industrial schools, reformatories, etc.(b) .. ..	953	328	1,037	169	31	42	2,560
In licensed or approved institutions .. ..	..	1,742	..	84	580	149	2,555
Boarded-out—							
With own mothers ..	6,994	5,680	5,324	312	82	1,781	20,173
With licensed foster-mothers, guardians, relatives and friends	2,534	1,424	443	6,028	213	341	10,983
Total children maintained or subsidized by the State	10,481	9,174	6,804	6,593	906	2,313	36,271
<i>B. Children not maintained or subsidized by the State.</i>							
In licensed or approved institutions .. ..	1,067	..	..	..	..	..	1,067
Boarded-out .. ..	147	..	..	1,169	479	..	1,795
On probation (from Institutions or Children's Courts) .. ..	2,085	1,346	152	322	233	..	4,138
In service or apprenticed	147	254	381	190	287	..	1,259
Adopted or otherwise placed .. ..	228	..	6	8	..	..	242
Total children not maintained or subsidized by the State .. ..	3,674	1,600	539	1,689	999	..	8,501
Total children under State control or supervision ..	14,155	10,774	7,343	8,282	1,905	2,313	44,772
Gross cost of children's relief .. ..	£ 431,103	£ 292,480	£ 195,309	£ 59,876	£ 28,010	£ 14,848	£ 1,021,626
Receipts from parents' contributions, etc. ..	28,669	13,004	8,701	4,545	8,495	1,819	65,233
Net cost to State ..	402,434	279,476	186,608	55,331	19,515	13,029	956,393

(a) The figures relate to the years ended as follows :—New South Wales and Tasmania—30th June, 1942; Victoria—31st December, 1941; Queensland—31st December, 1940; Other States—30th June, 1941.

(b) Includes inmates of hospitals.

(c) Includes 5,618 children in receipt of Ration Relief.

The total expenditure on children's relief in the previous table shows considerable variation amongst the States owing to the different methods of treating assistance to mothers with dependent children. In South Australia, Western Australia and Tasmania, large amounts have been excluded from the total expenditure on this account owing to the difficulty of obtaining separate amounts for allowances made in respect of the dependent children only.

4. **Leper Hospitals.**—Isolation hospitals for the care and treatment of lepers have been established in New South Wales (Little Bay); Queensland (Peel Island, near Brisbane, and Fantome Island, North Queensland); Western Australia (Derby); and the Northern Territory (Channel Island, near Darwin). At the end of 1943 there were 18 cases in residence at Little Bay, 38 at Peel Island, 73 at Fantome Island, 267 at Derby, 47 at Channel Island, 1 at Coode Island Hospital, Melbourne, Victoria, and 4 isolated cases in the south of Western Australia. Of the 448 cases, 378 are aboriginals, 14 Asiatics and 56 Europeans.

5. **Hospitals for the Insane.**—(i) *General.* The methods of compiling statistics of insanity are fairly uniform throughout the States, but comparisons are of doubtful validity, because of an element of uncertainty as to possible differences in diagnosis in the early stages of the disease.

(ii) *Hospitals, Staff, etc., 1941.* Particulars regarding the number of institutions, the medical and nursing staffs, and accommodation are given in the following table for the year 1941 :—

#### HOSPITALS FOR THE INSANE : NUMBER, STAFFS, ACCOMMODATION, 1941.(a)

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Number of Institutions ..	11	9	5	2	4	1	32
Medical Staff—							
Males .. ..	30	31	8	7	4	2	82
Females .. ..	6	..	1	..	..	1	8
Total .. ..	36	31	9	7	4	3	90
Nursing Staff and Attendants—							
Males .. ..	720	521	299	172	142	79	1,933
Females .. ..	772	563	276	171	103	80	1,965
Total .. ..	1,492	1,084	575	343	245	159	3,898
Accommodation—							
Number of beds and cots	11,181	6,587	3,779	1,910	1,509	750	25,716

(a) The figures relate to years ended as follows :—New South Wales, Queensland and Tasmania—30th June, 1942; Victoria—31st December, 1941; South and Western Australia—31st December, 1940.

(iii) *Patients, 1941.* Information regarding patients treated, deaths, etc., for 1941 is given in the table hereunder :—

#### HOSPITALS FOR THE INSANE : PATIENTS, DEATHS, ETC. 1941.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Number of distinct persons treated during year (b)—							
Males .. ..	7,106	3,871	2,423	1,075	1,016	390	15,881
Females .. ..	6,617	4,305	1,920	965	607	432	14,846
Total .. ..	13,723	8,176	4,343	2,040	1,623	822	30,727

(a) See footnote (a) to previous table.

(b) Excludes transfers to other institutions.



## HOSPITALS FOR THE INSANE: PATIENTS, DEATHS, ETC., 1941(a)—continued.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Number of patients on books at beginning of year—							
Males .. .. .	6,261	3,484	2,135	948	924	308	14,060
Females .. .. .	5,789	3,801	1,637	852	558	333	12,970
Total .. .. .	12,050	7,285	3,772	1,800	1,482	641	27,030
Admissions and re-admissions excluding absconders retaken and transfers from other institutions—							
Males .. .. .	845	387	288	127	92	82	1,821
Females .. .. .	828	504	283	113	49	99	1,876
Total .. .. .	1,673	891	571	240	141	181	3,697
Discharges (including absconders not retaken)—							
Males .. .. .	454	186	192	49	34	47	962
Females .. .. .	428	215	122	51	21	63	900
Total .. .. .	882	401	314	100	55	110	1,862
Deaths—							
Males .. .. .	433	216	163	53	59	23	947
Females .. .. .	361	218	131	40	36	23	809
Total .. .. .	794	434	294	93	95	46	1,756
Number of patients on books at end of year—							
Males .. .. .	6,219	3,469	2,068	973	923	320	13,972
Females .. .. .	5,828	3,872	1,667	874	550	346	13,137
Total .. .. .	12,047	7,341	3,735	1,847	1,473	666	27,109
Average daily number resident—							
Males .. .. .	5,929	2,968	2,035	956	916	320	13,124
Females .. .. .	5,391	3,401	1,601	859	539	340	12,131
Total .. .. .	11,320	6,369	3,636	1,815	1,455	660	25,255
Number of patients on books at end of year per 1,000 of population—							
Males .. .. .	4.45	3.61	3.85	3.26	3.77	2.64	3.91
Females .. .. .	4.18	3.96	3.35	2.92	2.46	2.92	3.73
Total .. .. .	4.28	3.79	3.61	3.09	3.15	2.78	3.82
Average number of patients resident in hospitals for insane per 1,000 of mean population—							
Males .. .. .	4.19	3.09	3.77	3.20	3.74	2.64	3.67
Females .. .. .	3.84	3.48	3.22	2.87	2.41	2.87	3.42
Total .. .. .	4.02	3.30	3.51	3.03	3.11	2.76	3.56

(a) See footnote (a) to previous table.

In some States persons well advanced towards recovery are allowed to leave the institutions and reside with their relatives or friends, but they are under supervision and their names are kept in the records.

(iv) *Revenue and Expenditure, 1941.* The revenue of Government hospitals for the insane is small in comparison with their cost, and consists chiefly of patients' fees. The proportion of expenditure borne by the State amounts to about 85 per cent.

#### HOSPITALS FOR THE INSANE : FINANCES, 1941.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£	£	£	£	£	£	£
Revenue (excluding Government Grants)—							
Fees of Patients .. ..	134,055	56,179	33,399	34,914	17,935	8,424	284,906
Other .. ..	9,590	6,772	1,535	50	2,414	105	20,466
Total .. ..	143,645	62,951	34,934	34,964	20,349	8,529	305,372
Expenditure—							
Salaries and Wages ..	565,771	300,388	176,604	82,850	79,757	43,951	1,249,321
Upkeep and Repair of Buildings, &c. ..	5,487	18,052	..	5,803	1,330	1,020	31,692
All Other(b) .. ..	299,890	208,057	137,989	68,801	83,746	24,655	823,138
Total .. ..	871,148	526,497	314,593	157,454	164,833	69,626	2,104,151
Expenditure per Average Daily Resident ..	£76/19/2	£82/13/4	£86/10/5	£86/15/0	£113/5/9	£105/9/11	£83/6/4

(a) The figures relate to years ended as follows:—South Australia—31st December, 1940; Western Australia—30th June, 1941; other States—30th June, 1942. (b) Includes the following amounts for capital expenditure on Purchases of Land, Cost of New Buildings, and Additions to Buildings: New South Wales, £32,758; Queensland, £38,081; South Australia, £5,608; Western Australia, £35,080.

(v) *Summary for Australia, 1937 to 1941.* The table hereunder gives a summary of hospitals for the insane in Australia during each of the five years 1937 to 1941. The figures for the States cannot be brought to a common year: consequently the following particulars relate to a combination of calendar and financial years. Licensed houses are included in all particulars excepting revenue and expenditure for New South Wales. The figures exclude those of reception houses and observation wards in gaols. In New South Wales the expenditure includes cost of Broken Hill patients treated in South Australian hospitals:—

#### HOSPITALS FOR THE INSANE : SUMMARY, AUSTRALIA.

Particulars.	1937.	1938.	1939.	1940.	1941.
Number of institutions .. ..	36	35	35	34	32
" " beds .. ..	25,287	25,654	26,097	25,771	25,716
Admissions .. ..	3,678	3,757	3,842	3,667	3,697
Discharged as recovered, relieved, etc. ..	1,573	1,800	1,819	1,801	1,862
Deaths .. ..	1,488	1,632	1,798	1,490	1,756
Expenditure—Total .. ..	£1,867,170	1,903,817	2,066,440	2,090,110	2,104,151
" —Per Average Daily Resident ..	£78/8/1	£79/2/4	£84/13/6	£84/3/1	£83/6/4

(vi) *Number of Insane, 1937 to 1941.* The total number returned as under treatment shows a continuous increase during the period but the proportion showed a slight decline in 1941. A more rational attitude towards the treatment of mental cases has resulted in a greater willingness in recent years to submit afflicted persons to treatment at an earlier stage, and an increase in the number of recorded cases, therefore, does not necessarily imply an actual increase in insanity.

## INSANE PERSONS IN INSTITUTIONS.

State.			1937.	1938.	1939.	1940.	1941.
NUMBER.							
New South Wales	..	..	11,473	11,678	11,835	12,050	12,047
Victoria	..	..	7,302	7,326	7,285	7,285	7,341
Queensland	..	..	3,544	3,650	3,692	3,772	3,735
South Australia	..	..	1,709	1,747	1,800	1,847	(a) 1,902
Western Australia	..	..	1,521	1,477	1,482	1,473	(a) 1,472
Tasmania	..	..	635	631	640	641	666
Australia	..	..	26,184	26,509	26,734	27,068	27,163
PER 1,000 OF POPULATION.							
New South Wales	..	..	4.22	4.25	4.26	4.32	4.29
Victoria	..	..	3.93	3.91	3.86	3.83	3.79
Queensland	..	..	3.53	3.59	3.60	3.66	3.61
South Australia	..	..	2.89	2.94	3.01	3.09	3.17
Western Australia	..	..	3.33	3.19	3.18	3.15	3.17
Tasmania	..	..	2.71	2.67	2.67	2.67	2.78
Australia	..	..	3.82	3.82	3.80	3.85	3.83

(a) 31st December, 1941.

The difference between States in the number of insane persons in institutions per 1,000 of population may be due to some extent to differences in classification.

(vii) *Causes of Insanity.* The general information available respecting the causes of the insanity of persons admitted to institutions is too unsatisfactory to be given in detail.

(viii) *Length of Residence in Hospital, 1941.* (a) *New South Wales and Victoria.* Particulars are not available regarding the average length of residence in hospitals of persons who died or were discharged during the year.

(b) *Queensland.* The average residence of those who died during 1941-42 was 9 years 358 days for males, and 7 years 336 days for females; of those discharged, 1 year 207 days for males, and 1 year 191 days for females.

(c) *South Australia.* The average residence of those who died during 1940 was 8 years 6 months 22 days for males, and 9 years 4 months 12 days for females; of those discharged, 1 year 8 months 23 days for males, and 1 year 6 months 13 days for females.

(d) *Western Australia.* The average residence of those who died in 1940 was 12 years 5 months 19 days for males, and 7 years 5 months 25 days for females; of those discharged, 2 years 1 month 16 days for males, and 3 years and 5 days for females.

(e) *Tasmania.* The average residence of those who died during 1940-41 was 4 years 10 months and 15 days for males, and 14 years and 8 months 14 days for females; of those discharged, 1 year 3 months 3 days for males, and 1 year and 22 days for females.

6. *Care of the Feeble-minded.*—An account of the treatment of the feeble-minded in Tasmania supplied by the Public Health Department of Tasmania, appeared in *Official Year Book No. 19*, pp. 477-8.

7. *Protection of Aborigines.*—For the protection of the aboriginal Australian race there are institutions, under the supervision of Aborigines Boards, where these people are housed and encouraged to work, the children receiving elementary education. The work is usually carried on at mission stations, but many of the natives are nomadic, and receive food and clothing when they call, whilst others but rarely come near the stations. The native race is extinct in Tasmania. The expenditure from Consolidated



Revenue in 1942-43 was: New South Wales, £63,967; Victoria, £4,505; Queensland, £66,531; South Australia, £34,105; Western Australia, £40,146; Northern Territory, £23,398; Australian Capital Territory, £321; total for Australia, £232,973. According to the latest census taken by this Bureau, the number of full-blood and half-caste aborigines living in supervised camps in each State at 30th June, 1941, was as follows:—

**ABORIGINES IN SUPERVISED CAMPS, 30th JUNE, 1941.**

Particulars.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Northern Territory.	Total.
	No.	No.	No.	No.	No.	No.	No.
Full-bloods ..	373	33	4,853	517	3,503	6,329	15,608
Half-castes ..	4,114	351	2,463	1,076	2,153	783	(a) 11,207

(a) Including 184 in Tasmania and 83 in the Australian Capital Territory.

Particulars regarding total numbers of aborigines in each State will be found in the Chapter XII. "Population".

8. **Royal Life Saving Society.**—In each of the State capitals, "centres" of the Royal Life Saving Society have been established, and in some States sub-centres have also been established in the larger provincial districts. In 1934 an Australian Federal Council of this Society was formed with headquarters at Melbourne, and each State centre, or branch, as it is now called, is controlled by the new organization. Saving of life from drowning and other forms of asphyxiation is the object of the Society, and its immediate aims are (a) educative and (b) remedial. The encouragement of swimming and life-saving in schools, colleges, clubs, etc., will bring about a more widespread knowledge of these necessary matters, and there is increasing provision of life-belts, reels, lines, and other first-aid appliances on ocean beaches, wharves and other suitable places. Numerous certificates of proficiency in various grades are issued annually after examination throughout Australia, the number for the individual States for 1939-40 being:—New South Wales, 15,919; Victoria, 5,328; Queensland, 1,270; South Australia, 601; Western Australia, 1,862; Tasmania, 366; and Fiji, which comes under the control of the Australian Federal Council, 157.

9. **Royal Humane Society.**—The Royal Humane Society of Australasia has for its objects (a) to grant awards for skill, promptness and perseverance in life-saving, where the rescuer has risked his or her life; (b) to provide assistance in cases of danger and apparent death; (c) to restore the apparently drowned; (d) to collect and circulate the latest information regarding approved methods and apparatus for life-saving. Awards of medals and certificates are made numbering about 100 annually. Swimming is encouraged amongst school children, and awards are made for proficiency.

10. **Other Charitable Institutions.**—Owing to variety of name and function of other charitable institutions it has been found impracticable to give detailed results. The aid given in kind—food, clothing, tools of trade, etc.—is considerable, whilst the shelter and treatment afforded range from a bed for a night for casual callers in establishments ministering minor charity, to indoor treatment over long periods in those that exist for the relief of the aged and the infirm. The institutions not so particularized include asylums for the deaf, dumb and blind, infant homes, homes for the destitute and aged poor, industrial colonies, night shelters, crèches, homes of hope, rescue homes, free kindergarten and ragged schools, auxiliary medical charities, free dispensaries, benevolent societies and nursing systems, ambulance and health societies, boys' brigades, humane and animals' protection societies, prisoners' aid associations, shipwreck relief societies, bush fire and mining accident relief funds, etc.

11. **Total Expenditure on Charities.**—Issues of the Official Year Book prior to No. 24 embodied statistics of expenditure on charities. The returns available, however, included a portion only of direct expenditure by Governments, and, in general, there is lack of harmony in the information available for the different States. Pending the result of further inquiry it has been decided to omit this table from the present chapter.

## CHAPTER IX.

## PUBLIC HYGIENE.

## § 1. Public Health Legislation and Administration.

Reference to the various public health authorities, Commonwealth and State, their functions, and the legislation administered, may be found in earlier issues of the Official Year Book (see No. 22, pp. 493-5).

## § 2. Inspection and Sale of Food and Drugs.

Legislation in force in all States provides for the inspection of food and drugs with the object of ensuring that all those goods which are sold shall be wholesome, clean and free from contamination or adulteration; and that all receptacles, places and vehicles used for their manufacture, storage or carriage shall be clean. For further particulars in this connexion, and with respect also to the sale and custody of poisons, reference should be made to Official Year Book, No. 22, pp. 495-7.

## § 3. Supervision of Dairies, Milk Supply, Etc.

1. **General.**—In earlier issues (see No. 22, p. 498), reference is made to the legislation in force in the various States to ensure the purity of the milk supply and of dairy produce generally.

2. **Number of Dairy Premises Registered.**—The following table shows, so far as the particulars are available, the number of dairy premises registered and the number of cows in milk thereon. In some States registration is compulsory within certain proclaimed areas only.

DAIRY PREMISES REGISTERED, AND COWS IN MILK THEREON, 1942.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tasmania.
Premises registered ..	19,784	24,418	29,760	12,145	358	6,611
Cows in milk thereon ..	651,186	570,969	714,100	114,280	11,428	(b)

(a) Premises within a district extending 25 miles north and 90 miles south of Perth only.  
available.

(b) Not

## § 4. The National Health and Medical Research Council.

In 1926, the Commonwealth Government established a Federal Health Council, in accordance with a recommendation of the Royal Commission on Health (1925), "for the purpose of securing closer co-operation between Commonwealth and State Health Authorities". This Council held sessions each year except in 1932. In 1936, the Commonwealth Government decided to create a body with wider functions and representation, and the National Health and Medical Research Council was established with the following functions:—

To advise Commonwealth and State Governments on all matters of public health legislation and administration, on matters concerning the health of the public and on medical research;

To advise the Commonwealth Government as to the expenditure of money specifically appropriated as money to be spent on the advice of this Council;

- To advise the Commonwealth Government as to the expenditure of money upon medical research and as to projects of medical research generally ;
- To advise Commonwealth and State Governments upon the merits of reputed cures or methods of treatment which are from time to time brought forward for recognition.

The constitution of the Council consists of the Commonwealth Director-General of Health as Chairman, with two officers of his Department, the official head of the Health Department in each State, together with representatives of the Federal Council of the British Medical Association, the Royal Australasian College of Surgeons, the Royal Australasian College of Physicians, and (jointly) the four Australian Universities having medical schools. A prominent layman and laywoman, appointed by the Commonwealth Government, also serve on the Council.

The first session of the National Health and Medical Research Council met at Hobart in February, 1937 ; the sixteenth session met at Canberra in November, 1943.

Under the Medical Research Endowment Act 1937, the Commonwealth Government has made an annual appropriation of funds to provide assistance :—

- (a) to Departments of the Commonwealth or of a State engaged in medical research ;
- (b) to Universities for the purpose of medical research ;
- (c) to institutions and persons engaged in medical research ;
- (d) in the training of persons in medical research.

Approved Research Institutions under this system now number 26. During the year 1942, grants numbered 22 in the following fields: bacteriology, biochemistry, clinical medicine, dentistry, neurology, nutrition, obstetrics, ophthalmology, physiology and pharmacology, tuberculosis and virus diseases. In certain instances, equipment and apparatus have been made available by the Council ; this has greatly facilitated some specialized lines of research.

The work that is being done under these grants is already yielding results ; beyond this practical achievement, the original objectives of the Council are being attained in encouraging young graduates to take up research work and in securing a continuity and permanence of medical research in Australia.

## § 5. The Commonwealth Department of Health.

1. **General.**—An Order-in-Council dated 3rd March, 1921, defined various functions to be performed by the Commonwealth Department of Health in addition to quarantine, which is the only specific public health power of the Commonwealth Parliament under the Commonwealth Constitution. Many essential services have been developed by the Department to meet current needs and to further public health throughout Australia. In earlier issues of the Official Year Book reference has been made to several features of this development, including: The Royal Commission on National Health, 1925 (see No. 22, pp. 509-10), the International Pacific Health Conferences (see No. 22, p. 510 and No. 29, p. 334), Industrial Hygiene (see No. 18, pp. 522-55), Tropical Hygiene (see No. 22, pp. 506-7, No. 25, pp. 416-7, and No. 32, p. 226), and the Commonwealth Advisory Council on Nutrition (see No. 32, p. 222). Reference to quarantine is made below (see § 6, par. 2.)

2. **The Commonwealth Serum Laboratories.**—The establishment for the preparation of Jennerian vaccine situated at Royal Park, near Melbourne, formerly known as the "Calf Lymph Depot" was in 1918 greatly enlarged by the Commonwealth. The remodelled institution is designated the "Commonwealth Serum Laboratories" and is administered by the Commonwealth Department of Health. The Laboratories are now installed in fully equipped buildings and a large staff is employed. At Broadmeadows a farm of 254 acres has been developed, under veterinary supervision, for the many thousands of animals required for the work of the laboratories.



The list of biological preparations produced by the laboratories has been extended until at the present time almost the whole range of these products is manufactured and Australia is practically independent of other countries in thus producing its own requirements. War needs have greatly increased all activities. Constant research is being conducted into every relevant aspect of bacteriology and immunology and new sera and prophylactic agents are being tested as the growth of medical knowledge opens up new avenues of treatment, prevention and diagnosis. Other original and applied research relating to all aspects of public health is maintained. The laboratories serve as the national centre for the maintenance in Australia of the international standards of the Permanent Commission on Biological Standards of the League of Nations.

For the past eighteen years the production of veterinary biological products has been a feature of the work of the laboratories. In recent years an extensive development has occurred in this direction and the products are being used in greatly increased amounts in all States for the prevention or treatment of diseases in domestic animals and stock.

**3. The Commonwealth Health Laboratories.**—The twelve Health Laboratories of the Department are situated at strategic points throughout Australia. They are located at Darwin, Cairns, Townsville, Rockhampton, Toowoomba, Lismore, Bendigo, Launceston, Hobart, Port Pirie, Kalgoorlie and Broome. These laboratories were established as an essential part of the quarantine system but were also to undertake research into local health problems and to provide medical practitioners of each district with up-to-date facilities for laboratory investigation and diagnosis. It was realized that co-operation between the general practitioner with his clinical observations and knowledge of the environment of disease on the one hand, and the staff of a well-equipped laboratory on the other hand, is essential to the efficient investigation of disease and the effective operation of control measures.

From this standpoint, the laboratories have already proved their value in the determination of Weil's disease and endemic typhus in North Queensland, in the investigation of special local problems at Darwin, of undulant fever throughout Australia, of silicosis and tuberculosis at Kalgoorlie and of plumbism at Port Pirie. In these investigations close co-operation has existed with State and local health and hospital services; especially is this so in Queensland where collaboration has yielded exceptionally valuable results in differentiating the groups of fevers hitherto unclassified in that State. In this investigational work, as well as in more routine activities, the laboratories have at their disposal the full resources and technical and specialist facilities available at the Commonwealth Serum Laboratories and the Sydney School of Public Health and Tropical Medicine.

A major part of the work performed at the Kalgoorlie Laboratory, since its establishment in 1925, has been the medical examination, on behalf of the State Department of Mines, of employees and applicants for employment in the metalliferous mines in that State. These examinations are performed in accordance with the provisions of the State Mines Regulation Act and the Mine Workers' Relief Act, the objects of which are to provide a healthy body of men for the industry and to free the industry of, and protect the future of, those found to be suffering from serious pulmonary disease. The examinations include clinical, laboratory and radiographic investigation. By means of a mobile X-ray unit an annual tour is also made of outlying mining centres.

In the seventeen years since the inception of this service over 30,000 men have been examined.

X-ray facilities are also provided at the Bendigo Laboratory as part of the campaign against tuberculosis, for the examination of miners and other radiographic work in the district.

**4. The School of Public Health and Tropical Medicine.**—The Commonwealth Government, under an agreement with the University of Sydney, established a School of Public Health and Tropical Medicine at the University of Sydney as from 4th March, 1930, for the purpose of training medical graduates and students in the subjects of public health and tropical medicine. The organization of the Australian Institute of Tropical Medicine at Townsville was merged in the new school, and the staff, equipment and material were transferred to Sydney.

The work of the school comprises both teaching and investigation. Courses are held for the University post-graduate diploma of public health and the diploma of tropical medicine and tropical hygiene. Lectures are given in public health and preventive medicine as prescribed for the fifth year of the medical curriculum. Other classes include students in architectural, social and school hygiene, and lay officers and nurses in the tropical services and missionaries.

Investigational work covers a wide field of public health and medical subjects, both in the laboratory and in the field. Field work has been carried out not only in Australia but in co-operation with the local administrations in Papua, New Guinea, Norfolk Island and Nauru. Further details may be found in previous issues of the *Official Year Book* (see No. 29, p. 334).

5. **The Australian Institute of Anatomy.**—Information concerning the Australian Institute of Anatomy at Canberra is given in previous issues of the *Official Year Book* (see No. 32, p. 919). In 1931 the Institute became an integral part of the Commonwealth Department of Health. The work of the Institute on general problems of comparative anatomy has now been concentrated on aspects of structure and function with special reference to the development of the growing child. Biochemical and biological research in this field is being developed in close association with the model kindergarten centres established by the Department in each capital city (see par. 8 below) and in specialized aspects of nutrition. The background of comparative anatomy and the museums of the Institute are maintained as part of the general plan of work, and an expert zoologist is a member of the body of research workers at the Institute.

6. **The Northern Territory Medical Service.**—As from 1st April, 1939, the Commonwealth Department of Health assumed administrative responsibility for the medical and health services of the Northern Territory, absorbing the Northern Territory Medical Service of the Territory Administration. The Health services of Darwin were strengthened with the growing importance of that town as the northern gateway to Australia and as an administrative and service centre. A new hospital at Darwin, not yet entirely completed, is now in use. The hospital at Alice Springs has been enlarged and in normal times the medical officer of the hospital acts as the flying doctor for the local base of the Australian Aerial Medical Services which provide for pilot, aircraft and ground services.

7. **National Fitness.**—Health authorities in Australia have closely followed the world-wide movement for the advancement of physical fitness and in several States active work has been proceeding over some years. In 1938, following a recommendation of the National Health and Medical Research Council, the Commonwealth Government agreed to appoint a Commonwealth Council for National Fitness, under the Commonwealth Minister for Health, to effect collaboration of Commonwealth, State, and local Government authorities in the movement. Meetings of this Council have been held at regular intervals; a sixth session was held in October, 1941. Meanwhile active State Councils have been formed in all States. As a result of the recommendations of the central Council, the Commonwealth Council agreed to make available an annual sum of £20,000 for five years and grants were allocated to each State for purposes of organization and to each of the six Australian Universities to establish lectureships in physical education. In July, 1941, a National Fitness Act was passed by the Commonwealth Parliament to ensure greater permanence to the movement. The movement continues to develop and to gain public interest and support throughout Australia.

8. **The Pre-school Child.**—Sessions of the National Health and Medical Research Council and the reports of the Commonwealth Advisory Council on Nutrition have called attention to the need for greater effort throughout Australia directed towards the care of the growing child, especially during the pre-school period. Movements for the care of the infant and the welfare of the school child are already developed by State authorities as recorded in §§ 7 and 8 below. It was felt by the Commonwealth Government that more could be done for the child of the pre-school age, and it was decided to give a lead by making possible a demonstration of the possibilities of effort and of the practical methods which could be employed.



In pursuance of these objectives the Commonwealth Government therefore decided to establish in each capital city a pre-school demonstration centre, and in order to achieve the best results in association with those who have had experience in this field it has secured the co-operation of the federal organization of Kindergarten Unions which is operating under the title of "The Australian Association for Pre-school Child Development". A suitable piece of land was secured in each capital city and the necessary school structure was built. The administration of these buildings is under the direction of the local Kindergarten Union, but the employment of staff and the technical methods used are approved by the Commonwealth Department of Health. This applies in so far as the educational side is concerned, and in this field advantage is being taken of the opportunity to try new methods and to make systematic records of observations with the object of securing reliable knowledge of the educational technique of this pre-school period.

Along with this educational practice there proceeds also the study of physiological requirements of the child and of the interaction between physical and mental health under varying conditions. In view of the importance, which has been indicated, of the study of growth and of nutrition of this age-period, these centres provide by reason of the children there available a considerable mass of human material for control and study. Not only are routine measurements made of height, weight and other bodily data, but problems of nutrition are studied in detail. The medical work at each of the States centres is carried on on a uniform basis, according to a scheme formulated at, and directed from, the Australian Institute of Anatomy, Canberra, where parallel investigations on the laboratory side are being undertaken.

9. **Organization for the Control of Cancer.**—The persistent increase in cancer mortality has led to the development in Australia of a national organization directed towards the control of this disease. The Commonwealth Department of Health has actively participated in this movement. Since 1928 the Australian Cancer Conferences, convened by the Department, have provided an opportunity each year for those actively engaged in the campaign against the disease to meet for the discussion of problems and the determination of lines of action and further development. The tenth conference in this series met in New Zealand in February, 1939, and so marked an association which has been maintained between Australia and the Dominion since the inception of the conferences.

A large amount of radium purchased in 1928 by the Commonwealth Government for use in treatment and research has been distributed on loan to treatment centres throughout Australia. Under the terms of this loan, treatment at well-equipped clinics is available to all requiring it, irrespective of ability to pay. This work is co-ordinated by the Department. Records of treatment and the results obtained are kept by all treatment centres on uniform lines and are collected and analysed. These records, in respect of certain parts of the body, are also collated in accordance with the international inquiry which was carried out under the auspices of the Cancer Commission of the Health Organization of the League of Nations in collaboration with the International Radiological Association.

Close co-operation is maintained between research workers, physicists and biochemists and the medical men engaged in the clinical investigation and treatment of the disease, so that problems are mutually investigated and treatment is applied with the highest attainable degree of scientific accuracy.

Realizing the essential importance of accuracy in determining the quality of radiation used in the treatment of cancer and in measuring the dosage of this radiation actually delivered to the tumour, and the need for the investigation of physical problems in connexion with the utilization of X-rays and radium in the treatment of disease, the Commonwealth Department of Health has now extended the work of the Commonwealth Radium Laboratory, which was established in 1929, to include the investigation of the physical problems of radiation therapy generally. This laboratory, which is now known as the Commonwealth X-ray and Radium Laboratory, was established at the University of Melbourne by agreement with the Council of the University, and is maintained,



controlled and staffed by the Commonwealth Department of Health. It is accommodated in a separate laboratory building of sixteen rooms specially designed for X-ray and radium work, and is well provided with all necessary equipment for research work, including a high-tension generator capable of supplying 500,000 volts to an X-ray tube. This laboratory is actively at work and its specialist officers co-operate closely with the local physical services which are being developed at the Universities in the other capital cities of Australia. The laboratory also continues its earlier work of production of radon for treatment, the repair of radium apparatus, and research into problems of treatment and protection. During the year 1943 a total quantity of 67,540 millicuries of radon was prepared and issued by this laboratory and the associated centres in Sydney, Adelaide, Brisbane and Perth. Used in the treatment of cancer and for research purposes this production represents a continuing increase over the output of previous years.

10. **Veterinary Hygiene and Plant Quarantine.**—In 1927 Directors were appointed to control divisions of the Commonwealth Department of Health which have been created to deal with veterinary hygiene and plant quarantine.

### § 6. Control of Infectious and Contagious Diseases.

1. **General.**—The provisions of the various Acts in regard to the compulsory notification of infectious diseases and the precautions to be taken against the spread thereof may be conveniently dealt with under the headings—Quarantine ; Notifiable Diseases, including Venereal Diseases ; and Vaccination.

2. **Quarantine.**—The Quarantine Act is administered by the Commonwealth Department of Health, and uniformity of procedure has been established in respect of all vessels, persons and goods arriving from oversea ports or proceeding from one State to another, and in respect of all animals and plants brought from any place outside Australia. In regard to interstate movements of animals and plants, the Act becomes operative only if the Governor-General be of opinion that Federal action is necessary for the protection of any State or States ; in the meantime the administration of interstate quarantine of animals and plants is left in the hands of the States. The Commonwealth possesses stations in each State for the purposes of human and of animal quarantine.

Further information concerning the chief provisions of the Act and its administration is given in some detail in earlier issues of the Official Year Book (see No. 22, p. 500).

3. **Notifiable Diseases.**—A. **General.**—(i) *Methods of Prevention and Control.* Provision exists in the Health Acts of all the States for the observance of precautions against the spread and for the compulsory notification of infectious disease. When any such disease occurs, the local authority must at once be notified, and in some States notification must be made also to the Health Department. The duty of making this notification is generally imposed, first, on the head of the house to which the patient belongs, failing whom on the nearest relative present, and, on his default, on the person in charge of or in attendance on the patient, and, on his default, on the occupier of the building. Any medical practitioner visiting the patient is also bound to give notice.

As a rule the local authorities are required to report from time to time to the Central Board of Health in each State as to the health, cleanliness and general sanitary state of their several districts, and must report the appearance of certain diseases. Regulations are prescribed for the disinfection and cleansing of premises, and for the disinfection or destruction of bedding, clothing, or other articles which have been exposed to infection. Bacteriological examinations for the detection of plague, diphtheria, tuberculosis, typhoid and other infectious diseases within the meaning of the Health Acts are continually being carried out. Regulations are provided in most of the States for the treatment and custody of persons suffering from certain dangerous infectious diseases, such as small-pox and leprosy.

(ii) *Details by States.* In earlier issues of the Official Year Book (see No. 22, p. 501) information was given concerning the notification, etc., of diseases under State headings.

(iii) *Diseases Notifiable and Cases Notified in each State and Territory.* The following table, which has been compiled by the Commonwealth Department of Health, shows for the year 1942 the diseases which are notifiable in each State and the Australian Capital Territory and the number of cases notified. Diseases not notifiable in a State or Territory are indicated by an asterisk.

**DISEASES NOTIFIABLE IN EACH STATE AND TERRITORY AND NOTIFICATIONS FOR THE YEAR ENDED 31st DECEMBER, 1942.**

Disease.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.†	Aust. Cap. Terr.	Aust.
Anchylostomiasis ..	*	..	10	..	..	..	..	..	10
Anthrax ..	*	I	..	..	..	..	..	..	I
Beriberi ..	*	*	*	*	*	*	..	*	..
Bilharziasis ..	*	..	..	..	..	..	..	..	..
Cerebro-spinal Meningitis ..	879	575	204	280	353	77	..	3	2,371
Cholera ..	*	..	..	..	..	..	..	..	..
Coastal Fever(a) ..	*	*	4	*	*	*	*	*	4
Diphtheria ..	1,454	1,309	478	630	792	291	..	5	4,959
Dysentery(b) ..	..	11	29	17	..	I	..	..	58
Encephalitis Lethargica ..	12	2	2	5	..	..	..	..	21
Erysipelas ..	*	*	*	99	*	*	..	..	99
Filariasis ..	*	*	I	..	..	..	..	*	I
Helminthiasis ..	*	I	*	*	*	*	..	*	I
Hydatid ..	*	22	..	..	*	*	*	..	22
Influenza ..	*	*	*	130	*	*	..	*	130
Leprosy ..	4	..	2	I	47	..	..	..	54
Malaria ..	*	10	566	26	5	..	..	..	607
Measles ..	*	*	..	8,085	390	..	..	322	8,797
Plague ..	..	..	..	..	..	..	..	..	..
Poliomyelitis ..	34	23	7	3	18	7	..	..	92
Psittacosis ..	..	..	..	..	*	*	*	*	..
Puerperal Fever ..	244	14	140	25	2	9	..	..	434
Rubella ..	..	*	..	*	*	*	..	93	93
Scarlet Fever ..	1,576	3,150	603	856	160	72	..	4	6,421
Smallpox ..	..	..	..	..	..	..	..	..	..
Tetanus ..	*	6	*	*	*	*	*	*	6
Trachoma ..	..	..	*	*	*	*	*	*	..
Tuberculosis(c) ..	1,916	845	474	307	137	173	..	3	3,855
Typhoid Fever(d) ..	31	16	78	18	11	9	..	..	163
Typhus (Endemic)(e) ..	8	..	36	I	18	..	..	..	63
Undulant Fever ..	..	6	..	..	..	..	..	..	6
Weil's Disease(f) ..	*	*	10	*	*	*	*	*	10
Whooping Cough ..	*	*	*	1,313	*	*	..	4	1,317
Yellow Fever ..	..	..	..	..	..	..	..	..	..

\* Not notifiable. † Publication withheld.

(a) Includes "Mossman" and "Sarina" Fevers. (b) Includes amebic and bacillary. (c) Includes all forms except in New South Wales and Northern Territory where only pulmonary tuberculosis is notifiable. (d) Includes Enteric Fever and Paratyphoid. (e) Cases reported are all of the mild type known as Brill's Disease or Endemic Typhus. (f) Includes Leptospiroses, Weil's and Para-Weil's Disease.

**B. Venereal Diseases.**—(i) *General.* The prevention and control of venereal diseases are undertaken by the States. Each State has a Venereal Diseases Act, or provisions in the Health Act govern the working of the measures taken to combat these diseases. Under these Acts notification has been made compulsory in every State except South Australia, where the Venereal Diseases Act has not yet been proclaimed. Steps have been taken to ensure free treatment by medical practitioners or in subsidized hospitals and clinics. Registered pharmaceutical chemists are allowed to dispense prescriptions only when signed by medical practitioners. Clinics have been established and, in some cases, beds in public hospitals have been set aside for patients suffering from these diseases.

Penalties may be imposed on a patient who fails to continue under treatment. Clauses are inserted in the Acts which aim at preventing the marriage of any infected person and the employment of an infected person in the manufacture or distribution of foodstuffs.

For several years the Commonwealth Government granted a subsidy to each of the States to assist in providing hospital treatment and administrative control of venereal diseases, but this subsidy has been discontinued.

In 1927 a Division of Tuberculosis and Venereal Disease was established in the Commonwealth Department of Health, with a medical officer as Director. This Division ceased to exist in April, 1932.

(ii) *Details by States.* A statement of the preventive provisions in each State together with certain statistical data, appeared in earlier issues of the Official Year Book (see No. 22, pp. 503-4).

4. Vaccination.—(i) *Demand for Vaccine.* In New South Wales there is no statutory provision for compulsory vaccination, though in all the other States such provision exists. Jennerian vaccine for vaccination against small-pox is prepared at the Commonwealth Serum Laboratories in Melbourne. A moderate demand exists for the vaccine in Victoria, but in the other States the normal requirements are small, as is also the proportion of persons vaccinated.

(ii) *Details by States.* In earlier issues of the Official Year Book (see No. 22, pp. 504-5) information was given concerning the provisions regarding vaccination in each State.

## § 7. Medical Inspection of School Children.

1. *General.*—Medical inspection of school children is carried out in all the States. Medical staffs have been organized, and in some States travelling clinics have been established to deal with dental and ocular defects.

2. *New South Wales.*—A complete system of medical inspection of school children came into operation in this State in 1913. The scheme includes, in country districts, the medical examination of every child at least twice during the usual period of school attendance (6-15 years). In the metropolitan area, the scheme provides for the full medical examination of all children in first and sixth classes, and the review of children in other classes who have been found defective in previous years. Parents are notified of the defects found, and urged to have them treated. In the metropolitan area, these notices are reinforced by "follow-up" work of school nurses, who also arrange hospital and clinic treatment in many cases.

At the beginning of 1942 the staff comprised 13 medical officers (including 2 psychiatrists for the Child Guidance Clinics, and 1 oculist), 18 dental officers, 8 dental assistants, 8 school nurses, 3 psychologists, 3 social workers and 5 clerical officers. Two speech therapists were appointed during the year. Two medical officers were engaged in country districts, and 7 in the metropolitan area, and of the 18 travelling dental clinics (8 of which were each staffed by a dental officer and dental assistant), 9 were engaged in metropolitan schools and 9 in country districts. One of the metropolitan officers was also engaged half-time at the clinic attached to the Out-patients' Department of the Royal Alexandra Hospital for Children.

Special attention is paid to the supervision of the health of high school pupils, both girls and boys, and high schools in the metropolitan area, as well as certain country schools, are medically inspected annually.

Every student, before entering the Teachers' College, is medically examined, and any defects found must be remedied before final acceptance. Health supervision is maintained at these Colleges by women medical officers—whole-time at the Sydney College and part-time at the Armidale College. Also, a course of lectures on hygiene, which every student attends, is given by these officers assisted part-time at the Sydney College by one other medical officer.

The Child Guidance Clinics examine children referred by school medical officers, teachers, officers of the Child Welfare Department and various outside bodies, no fee being charged for any examination. During the year 1942, 1,118 boys were examined at the Clinic at the Metropolitan Boys' Shelter attached to the Children's Court.

Similar examinations are made in the case of girl delinquents.



The medical and/or psychological examination of many children referred from schools, also certain children under the jurisdiction of the Child Welfare Department, Widows' Pensions Branch and the Society for Crippled Children is also carried out by medical officers of this service, either at this Department or at Child Welfare Department institutions. From July to December, 2,281 treatments were given by the two speech therapists to children referred through school medical examinations or the Child Guidance Clinics.

The following summary furnishes particulars of children medically examined in schools in 1942:—

Number fully examined (routine inspection)	..	..	38,993
Number reviewed	..	..	20,809
Of those examined—percentage notified for defects, medical and/or dental	..	..	38.84 per cent.

These figures do not include record of the medical examination and health supervision of children in residence at the Glenfield Special School for backward children, which is carried out by a woman medical officer.

The School Medical Service carries out regular and/or periodical investigations into problems affecting the health of children, such as goitre, crippling, mental deficiency, stammering, left-handedness, faulty nutrition, trachoma, acute rheumatism, and special investigations into outbreaks of infectious diseases occurring in schools. The sanitary condition of school buildings is also inspected.

The foregoing statement does not include record of the numerous medical examinations of teachers, and other Departmental work of a medical nature, done by the School Medical Service.

The cost of this service, excluding administration charges, for the year ended 30th June, 1943, was £33,442.

3. Victoria.—Medical inspection of school children was established in 1909. One of the objectives of the system is to have each child medically examined once every three years in its school life. In 1925 the Department concentrated on country work, and medical inspection has been undertaken since that date in country and rural districts, reaching the most remote corners of the State. In spite of the comparatively small medical inspection staff, the plan for triennial visits to State schools is being fairly well maintained and all State High Schools, nearly all other State schools in the country, and some in the densely populated inner-metropolitan area are visited once in three or four years. Only a few of the registered and institutional schools are, however, visited.

At the medical inspection every child is first weighed and measured, tested for vision and hearing, then undressed to the waist and medically examined as for life assurance, but with a fuller investigation of many hygienic factors, which at that age greatly influence the health and growth of the child. Opportunity is also taken to teach the child healthy habits and how to correct faults, and to get its co-operation for the remedying of defects found. In schools with an attendance of 70 or more, the older boys are examined by a medical man and the older girls by a medical woman. School nurses employed by the Department are devoted to "follow-up" work, *i.e.*, visiting the homes and getting treatment for children found defective by the school medical officers. Owing to the smallness of the staff their work is confined to the metropolitan area.

In addition to the medical examination, each child in those schools visited by the school dentist receives dental treatment on entrance to school (if under 8 years of age), and each year thereafter, until it is 12 years of age, when it is left dentally fit. The present staff is arranged so that 3 dentists and 4 dental attendants are always on duty at the Melbourne Dental Centre, where children from the inner metropolitan schools are brought by the teacher for dental treatment. Two dentists with dental attendants and equipment travel along the railway line far enough to give one year's work, using practically every town large enough to provide a day's work as a base. The school committees of the outlying schools are notified of the visit, and the parents are invited to bring to the base all children eligible for treatment, *i.e.*, all children under 8 years of age, and all other children treated by the school dentists on previous visits. The time of another dentist is fully occupied treating the children in the three largest country centres.

Bendigo, Ballarat and Geelong. In each of these cities a centre with a dentist, dental attendant and equipment is established for about four months of the year, where children from the infant classes of the neighbouring schools are brought by the teacher or parents. Three dentists with dental attendants are in charge of three fully-equipped dental vans, each of which has an annual itinerary.

The staff of the medical branch consists of 7 full-time medical officers, 9 dentists, 11 dental attendants and 12 school nurses.

During the year ended 30th June, 1942, 50,524 children and 1,927 teachers were medically examined, and 29,678 children received dental treatment. In addition 3,559 homes were visited by the school nurses.

The cost of this service for the year 1942-43, was £22,743.

4. **Queensland.**—The School Health Services Branch, under the direction of the Chief Medical Officer, consists of three sections known as the Medical, Dental and Nursing Sections.

Medical inspection of schools and school children is carried out by one part-time officer under the general direction of the Chief Medical Officer, School Health Services. This officer as far as possible, examines children for cardiac and pulmonary conditions, and in addition makes a thorough examination of all children referred to him by the school nurses.

The nurses now number thirteen. Each nurse is assigned a group of schools and is instructed to make a list at each school of those children who should be seen by the medical inspector at his next visit. She supervises the sanitation, cleanliness and ventilation of the school and notifies the head teacher of all infectious or verminous children or those suffering from impetigo, scabies, etc., who are then excluded. During 1942, school nurses examined 36,645 children. In the metropolitan area the nurses examine the teeth and report all eligible carious cases to the Dental Hospital for treatment.

The Department has in its employ a staff of 15 dentists. These officers are each assigned a district, and such district is not changed for three years unless for reasons which the Chief Medical Officer, on the recommendation of the Chief Dental Inspector, considers advisable. During 1942, 30,392 children were examined; 17,736 extractions were performed; and there were 25,486 fillings and 8,594 other treatments.

At the Wilson Ophthalmic School Hostel children suffering from trachoma are treated and educated. They are admitted from time to time on the recommendation of the part-time Ophthalmic Officer. Beneficial results have already been obtained. The Institution is situated at Eildon Hill, Windsor, and is fully equipped to treat all types of eye case.

The work of Hookworm Control (the dealing with *ankylostomiasis duodenale* and *Necator Americanus* infestation) throughout the State is under the control of the Director-General of Medical Services and his deputy. This activity has resulted in a marked reduction in the incidence of this dangerous menace on the northern coastal belt. Several sisters of the School Health Services are seconded for hookworm duty. The personnel consists of a microscopist, a health inspector and two trained sisters.

In order to give the same medical and dental facilities to the children of the back country as are obtainable by city dwellers, a Rail Dental Clinic equipped on the most modern lines has been constructed. A motor car is carried on a railway waggon for use at each stopping place to visit the surrounding villages served by the rail centre.

This service cost £24,527 in 1942-43.

5. **South Australia.**—The system of medical inspection in force requires the examination of all children attending primary, junior technical, high and technical high schools. Children in the primary schools are examined in grades I., IV. and VII.; in the junior technical and high schools, children are examined in their second and fourth years. Reports are furnished to the parents of any remediable defects found during these examinations. The medical inspectors meet the parents after the examination of the children and give an address on the prevention and treatment of the conditions which were found during the inspection. After these lectures the parents are given an opportunity to ask questions regarding their children. When there is an epidemic or a threatened epidemic in a district, similar lectures are given and special visits paid to all the schools in that

locality. All students are examined before they enter the Teachers' College. Medical and physiological tests are conducted on all candidates taking the Diploma of Physical Education four times during the course (2 years). Courses of lectures in Hygiene and in First Aid are also given to these students.

The medical staff consists of a principal medical officer, 2 medical inspectors and a trained nurse. A psychologist, an assistant psychologist, a dentist, 2 dental assistants and a speech therapist are attached to the Medical Branch. The psychologist, in addition to examining retarded children and supervising their work in the opportunity classes, lectures to the students at the Teachers' College, and examines children referred by the Children's Court, or by the Children's Welfare Department, etc. The speech therapist examines children with defective speech, ascertains the nature of the defect and teaches the child to overcome it.

During 1942, 15,915 children were examined by medical inspectors; of these 834 required notices for defective vision, 87 for defective hearing, and 1,349 for tonsils and adenoids. Eight hundred and forty-two children were examined by the psychologists.

Of the 38,116 boys who have been examined in recent years 3.5 per cent. were wearing glasses at the time of the examination. The lenses were measured and the defects classified as follows:—myopia and myopic astigmatism, 396 (29.3 per cent.); hypermetropia and hypermetropic astigmatism, 852 (63.1 per cent.); and mixed astigmatism, 102 (7.6 per cent.). The annual cost of these services is approximately £5,600.

6. **Western Australia.**—Under the Public Health Act 1911–1935 the medical officers of health appointed by the local authorities became medical officers of schools and of school children. The principle aimed at is that each child shall be examined twice during its school life, once between the ages of 7 and 8 years and again between the ages of 12 and 13 years. In the Health Department there are 2 full-time medical officers for schools, whose duty is to conduct medical examinations, and 2 school nurses are employed. During 1942, 15,088 (8,086 metropolitan and 7,002 country) children were examined. In addition 352 metropolitan and 29 country school children were re-examined. There were 74 schools visited in the metropolitan area and 129 in country districts.

Three dental officers visited 44 schools and gave attention to 3,000 children. Cost of this service for 1942–43 was £4,644.

7. **Tasmania.**—The School Medical Service came under the administration of the Department of Public Health on 1st January, 1939. During 1942, 16 full-time Government Medical Officers and 7 school nurses were engaged in the work. An essential part of the School Medical Service is concerned with the condition of the children's teeth. During 1942, a permanent dental clinic functioned in each of the cities of Hobart and Launceston, while three travelling clinics operated in many of the remaining districts throughout the State.

The following summary furnishes particulars of (a) children medically examined in schools during 1942; and (b) children who received dental treatment for the same period:—

Number of children examined by medical inspectors, 6,377, of whom 4,602 had defects. First visits to dentists, 7,827, repeat visits 14,295.

Cost of services for year ended June, 1943, was £7,466.

8. **Australian Capital Territory.**—By arrangement education facilities are provided by the Education Department of New South Wales. The Commonwealth Department of Health, however, took over from the State in 1930 the medical inspection of school children and carried out examinations of entrants and those leaving during 1930.

Subsequent to 1931, examinations of entrants and those leaving the primary schools have taken place. During 1937 this examination was supplemented by examinations of all pupils of all rural schools (including Duntroon and Molonglo). During 1941 the examinations of entrants and those leaving the primary schools showed that 39.3 per cent. had dental defects, 6.0 per cent. had some pathological condition of the nasopharynx, 10.9 per cent. had eye defects, 2.8 per cent. had ear defects, 8.1 per cent. showed some



evidence of minor deformity, and 2.4 per cent. were 10 per cent. or more underweight for their height and age. Of the pupils recommended for medical advice 70 per cent. received this advice, and 53 per cent. of those recommended for dental treatment received such treatment. No examinations were undertaken in 1942.

### § 8. Supervision and Care of Infant Life.

1. General.—The number of infantile deaths and the rate of infantile mortality for the last five years are given in the following table, which shows that during the period 1938 to 1942 no less than 24,828 children died in Australia (excluding Territories) before reaching their first birthday. Further information regarding infantile mortality will be found in Chapter XIII. "Vital Statistics":—

#### INFANTILE DEATHS AND DEATH RATES.

	Metropolitan.					Remainder of State.				
	1938.	1939.	1940.	1941.	1942.	1938.	1939.	1940.	1941.	1942.
NUMBER OF INFANTILE DEATHS.										
New South Wales	712	667	758	942	877	1,268	1,302	1,169	1,322	1,239
Victoria	510	494	655	655	888	528	591	606	591	609
Queensland	215	181	201	244	234	569	541	520	598	502
South Australia	124	161	171	209	245	163	175	185	147	203
Western Australia	115	148	181	163	184	194	221	222	194	181
Tasmania	48	83	49	69	60	147	120	127	186	165
Australia(a)	1,724	1,734	2,015	2,282	2,488	2,869	2,950	2,829	3,038	2,899

RATE OF INFANTILE MORTALITY.(b)										
New South Wales	38.35	34.51	38.01	42.12	37.73	44.10	45.41	39.71	45.02	42.10
Victoria	34.19	32.15	39.69	34.68	43.93	34.22	39.07	39.20	38.07	38.76
Queensland	42.36	33.93	37.40	40.23	37.49	40.89	36.04	34.58	38.08	33.57
South Australia	27.36	31.82	35.37	36.40	39.48	33.42	35.05	35.70	28.14	40.02
Western Australia	29.76	37.93	47.15	35.21	37.51	36.76	42.97	42.03	35.34	36.24
Tasmania	40.03	47.09	40.56	48.97	42.37	39.64	38.58	33.54	48.99	42.43
Australia(a)	35.80	34.31	38.98	38.62	39.98	39.87	40.55	38.18	40.59	39.17

(a) Excludes Territories.

(b) Number of deaths under one year per 1,000 births registered.

During recent years greater attention has been paid to the fact that the health of the community depends largely on pre-natal as well as after-care in the case of mothers and infants. Government and private organizations, therefore, provide instruction and treatment for mothers before and after confinement, while the health and well-being of mother and child are looked after by the institution of baby health centres, baby clinics, crèches, visits by qualified midwifery nurses, and special attention to the milk supply, etc.

2. Government Activities.—In all the States acts have been passed with the object of supervising and ameliorating the conditions of infant life and reducing the rate of mortality. Government Departments control the boarding out to suitable persons of the wards of the State, and wherever possible the child is boarded out to its mother or near female relative. Stringent conditions regulate the adoption, nursing and maintenance of children placed in foster-homes by private persons, while special attention is devoted to the welfare of ex-nuptial children. (See also in this connexion Chapter VIII. "Public Benevolence".) Under the provisions of the Maternity Allowance Act 1912-1943, a sum of £5 is payable to the mother in respect of each confinement at which a living or viable child is born. Where there are already one or two children under 14 the amount payable is £6, and where there are three or more other children under 14 the amount

payable is £7 10s. In addition a payment of £1 5s. is made for each of the four weeks immediately before and immediately after the birth. Detailed particulars regarding Maternity Allowances are given in Chapter XVII "Public Finance".

3. Nursing Activities.—(i) *General*. In several of the States the Government maintains institutions which provide treatment for mothers and children, while, in addition, subsidies are granted to various associations engaged in welfare work.

(ii) *Details by States*. In earlier issues of the Official Year Book (see No. 22, pp. 515 and 516) information, with certain statistical data, concerning the activities of institutions in each State may be found.

(iii) *Summary*. The following table gives particulars of the activities of the Baby Health Centres and the Bush Nursing Associations :—

BABY HEALTH CENTRES AND BUSH NURSING ASSOCIATIONS, 1942.

Heading.	New South Wales.	Victoria. (a)	Queensland. (a)	South Australia.	Western Australia. (a)	Tasmania.	Aust. Capital Territory. (b)	Total.
Baby Health Centres—								
Metropolitan No.	60	83	38	49	14	3	..	247
Urban-Provincial and Rural No.	169	150	128	19	16	30	11	523
Total No.	229	233	166	68	30	33	11	770
Attendances at Centres ..	985,992	654,798	271,137 <sup>c</sup>	138,583	114,998	65,742	9,044	2,240,294
Visits paid by Nurses ..	67,982	75,279	18,902	29,051	17,103	21,620	2,567	232,504
Bush Nursing Association—Number of Centres ..	37	77	12	29	6	18	..	179

(a) Year ended 30th June, 1942.

(b) Year ended 30th June, 1941.

(c) Excludes non-expectant mothers accompanying infants.

The number of attendances at the Baby Health Centres has increased very considerably in recent years. The following are the figures for the years 1937 to 1941 :—1937, 1,657,052 ; 1938, 1,597,124 ; 1939, 1,869,770 ; 1940, 2,035,299 ; and 1941, 2,128,961.

## CHAPTER X.

### REPATRIATION.

#### § 1. General.

An outline of the activities leading up to the formation of the Commonwealth Repatriation Commission was given in Official Year Book No. 15, p. 931. Some account was given also in the Official Year Book referred to, and in subsequent issues, of the policy and general activities of the Department, while detailed information was incorporated in regard to such matters as sustenance rates and pensions to soldiers and dependants. (See Official Year Book No. 17, pp. 598–601.) In 1943 the Australian Soldiers' Repatriation Act was amended by the incorporation of the recommendations of the Parliamentary Committee appointed to inquire into pensions and repatriation benefits. A general increase was made of approximately 20 per cent. in the rates of war pensions and increases were also made in other repatriation benefits.

The main activities of the Repatriation Commission at 30th June, 1943, were confined to the grant, review and assessment of war and service pensions, the provision of medical treatment, employment, vocational training, the renewal and repair of artificial replacements and surgical appliances, the grant and review of sustenance and living allowances, and the administration of the Soldiers' Children Education Scheme.

#### § 2. War Pensions.

**1. General.**—Provision for the payment of war pensions to soldiers and their dependants was made by the Commonwealth Parliament in the War Pensions Act 1914 which came into operation on 21st December, 1914. This Act was repealed in 1920 by the Australian Soldiers' Repatriation Act. Particulars regarding pensions payable under both these Acts as amended are given on page 210 of the Official Year Book No. 34. Owing to the limited space in this volume only some of the main features relating to war pensions under the Australian Soldiers' Repatriation Act 1920–1943 are shown in the following paragraphs :—

(i) *Eligibility for Pension.* There has been a considerable widening of the provision in this respect, to the benefit, mainly, of Members of the Citizen Military Forces who have not served outside Australia. These provisions are summarized as follows :—

- (a) A member of the Forces who served : (1) outside Australia ; (2) in the Territories of Australia, such as Papua and New Guinea ; or (3) within Australia in circumstances which can be regarded as actual combat against the enemy ; is covered for war pension purposes in respect of incapacity or death which may result from any occurrence happening during the whole period of service.
- (b) In other cases where a member served only in Australia, incapacity or death to be pensionable must have been attributable to service.
- (c) There is a third ground applicable to all in (a) and (b) who have had at least six months' camp service. This provides that, where a condition pre-existed enlistment, a pension may accrue if it is considered that such condition was aggravated by service.

(ii) *Ordinary Rates.* Where the daily rate of service pay was not in excess of 19s. the ordinary rate of pension for total incapacity is £5 per fortnight. Where the daily service pay exceeds 19s., the ordinary rate of pension for total incapacity increases to a minimum rate of £6 16s. per fortnight according to the rate of pay. The wife of such member of the Forces receives £2 4s. and each child under 16 years of age 18s. per fortnight.

(iii) *Supplementation of Pension.* Where a member in receipt of a pension at the maximum rate is, because of his war disability, temporarily (for at least three months) precluded from earning, an additional pension, may be granted not exceeding £2 8s. per fortnight in the case of a married member and 30s. in the case of a single member.



(iv) *Women's Nursing and Auxiliary Services.* Members of Women's Services are now entitled to pensions and other benefits as prescribed in the Act. Pension scales are those applicable to male members of the Forces in receipt of similar rates of pay.

(v) *Tuberculosis Cases.* In the case of a member of the Forces who served in a theatre of war and, at any time after discharge became or becomes incapacitated, or died or dies, from pulmonary tuberculosis, war pension is payable, and medical treatment is provided on application as if the incapacity or death resulted from an occurrence or service. (*See also Service Pension.*)

(vi) *Special Rates.* Those who have been totally blinded as the result of war service and those who are permanently totally incapacitated receive special pensions of £9 12s. per fortnight. In addition an attendant's allowance of £2 8s. per fortnight is payable to the war-blinded and to certain others who are deemed to be in need of an attendant. The wife and any children receive the same rates as shown in para. (ii).

(vii) *Specific Disabilities.* In cases where the disability is amputation of a limb or total loss of vision in one eye, amounts ranging from 9s. to £4 12s. per fortnight are payable in addition to the statutory rate of pension and, in certain double amputation cases, allowances are payable for an attendant.

(viii) *Time Limit for Wives.* The time limit has been extended from seven years to fifteen years within which wives must marry in order to be eligible for pension in respect of the present war. The children of any such marriage, whenever born, are also eligible. With regard to the 1914 war the time limit for wives, i.e., 30th June, 1938, remains but in certain cases where a member of the Forces has married since that date an allowance not exceeding £2 4s. per fortnight may be granted to him in respect of his wife provided she performs duties essential to his welfare by reason of his war disability.

(ix) *Rates of Pensions in respect of Death.* (a) *Widows.* Where a member whose daily rate of service pay was not in excess of 27s. 6d. dies as a result of war service the rate of pension payable to his widow is £5 per fortnight. Where the service pay exceeds 27s. 6d. the rate of pension is higher ranging from £5 9s. to £6 16s. per fortnight.

(b) *Children of Member.* The first child (under sixteen years) receives a pension of 35s. and each subsequent child 25s. per fortnight. In the case of children both of whose parents are dead the rates payable are—each child up to 14 years of age 35s. and each child over 14 years and up to 16 years of age, 40s. per fortnight.

(x) *Widowed Mother on Death of Member.* A pension varying from £2 10s. to £6 16s. per fortnight according to the rate of pay of the member may be granted to a widowed mother, provided widowhood occurred either prior to or within three years after the death of the member.

2. *Appeal Tribunals.*—The principal Act was amended as from 1st June, 1929, to create tribunals to hear appeals in regard to war pensions. The War Pensions Entitlement Appeal Tribunal is empowered to hear and decide any appeal by or on behalf of ex-members of the Forces or their dependants, against a decision of the Repatriation Commission that an incapacity or the death of an ex-member did not arise out of war service. Assessment Appeal Tribunals were created, to hear and decide any appeal against a current assessment or a "Nil" assessment of war pension made by the Repatriation Commission in respect of an incapacity of an ex-member of the Forces which had been accepted as arising out of war service. Provision was made by subsequent legislation to enable the Tribunals to hear appeals by certain applicants for service pensions.

3. *War Pensions in Force.*—At 30th June, 1943, the number of war pensions was 226,853 and the annual liability £9,734,418. The outstanding features for 1942-43 were as follows :—

New claims granted	..	..	..	..	..	19,771
Claims rejected (gross)	..	..	..	..	..	17,337
Pensions reviewed	..	..	..	..	..	18,250
Pensions cancelled or discontinued	..	..	..	..	..	10,360
Deaths of pensioners	..	..	..	..	..	3,304
Number of pensions in force at 30th June, 1943	..	..	..	..	..	226,853
Annual pension liability at 30th June, 1943	..	..	..	..	..	£9,734,418

At 30th June, 1943, special rate pensions of £9 12s. per fortnight were being paid to—

Blinded soldiers .. .. .	173
Tubercular soldiers .. .. .	730
Totally and permanently incapacitated soldiers .. .. .	2,401

An analysis of the total number of new grants during the year reveals the following :—

Members (i.e., ex-soldier pensioners) .. .. .	6,114
Wives of members .. .. .	3,608
Children .. .. .	6,682
Other dependants .. .. .	3,367

19,771

In the following table the number receiving pensions at 30th June, 1943, is shown for each class of pensioner :—

#### WAR PENSIONS IN FORCE AT 30th JUNE, 1943.

Class.	Number of Pensioners.
Orphan children .. .. .	6,162
War widows .. .. .	13,667
Soldiers .. .. .	81,240
Children .. .. .	49,275
Wives .. .. .	63,385
Parents .. .. .	12,674
Brothers and sisters .. .. .	203
Others .. .. .	247
Total .. .. .	226,853

4. Number of Pensioners and Expenditure.—The following table shows the number of pensioners at 30th June, 1943, and the places where payments were made during 1942-43 :—

#### WAR PENSIONS : NUMBER OF PENSIONERS AND EXPENDITURE, 1942-43.

Where Paid.	Incapacitated Members of the Forces.	Dependants of—		Total.	Expenditure.
		Deceased Members.	Incapacitated Members.		
	No.	No.	No.	No.	£
New South Wales .. .. .	28,518	10,465	39,022	78,005	2,897,869
Victoria .. .. .	25,921	9,251	36,583	71,755	2,497,300
Queensland .. .. .	9,229	3,098	13,012	25,339	943,691
South Australia .. .. .	5,187	2,801	7,093	15,081	575,168
Western Australia .. .. .	7,138	2,764	10,343	20,245	752,885
Tasmania .. .. .	3,456	1,221	5,775	10,452	434,228
Total, Australia .. .. .	79,449	29,600	111,828	220,877	8,101,141
London .. .. .	1,493	1,615	2,141	5,249	265,855
Union of South Africa .. .. .					
New Zealand .. .. .					
Other Overseas .. .. .					
	298	118	311	727	
Total .. .. .	81,240	31,333	114,280	226,853	8,366,996

The following table shows the numbers of pensions granted, claims rejected, pensions in force, and the amount paid in pensions for the years ended 30th June, 1931, and for each of the seven years ended 30th June, 1943 :—

### WAR PENSIONS : SUMMARY, AUSTRALIA.

Year ended 30th June—	Pensions Granted.	Claims Rejected.	Pensions in Force.				Amount paid in Pensions.
			Incapaci- tated Members of the Forces.	Depend- ants of Deceased Members.	Depend- ants of Incapaci- tated Members.	Total.	
							£
1931 ..	11,555	920	75,316	35,617	172,389	283,322	7,996,180
1937 ..	5,098	9,508	77,076	29,422	145,308	251,806	7,683,089
1938 ..	19,993	8,357	77,315	28,562	151,337	257,214	7,761,207
1939 ..	6,794	7,541	77,151	27,571	144,571	249,293	7,819,289
1940 ..	2,469	4,846	76,462	26,388	134,027	236,877	7,682,246
1941 ..	2,851	5,193	75,767	25,937	123,787	225,491	7,488,531
1942 ..	8,907	9,448	76,641	27,679	116,019	220,339	7,501,911
1943 ..	19,771	17,337	81,240	31,333	114,280	226,853	8,366,996

5. Cost of Administration.—The cost of administration in 1942-43 was £354,936 representing 3.49 per cent. of the total cost of benefits disbursed. The administrative costs of the War Pensions Appeal Tribunals are included in the foregoing figure and totalled £20,548.

### § 3. Service Pensions.

1. General.—The payment of service pensions was provided for in the Australian Soldiers' Repatriation Act 1935, and the scheme has operated since 1st January, 1936.

Originally fixed on a lower scale, the maximum rate of service pension for a member of the Forces now coincides with the maximum rate of invalid or old-age pension. The rate at 26th August, 1943, was 54s. per fortnight. The maximum rate for the wife of a member is 44s. per fortnight, whilst 10s. per fortnight is payable for the eldest child under 16 years of age and 5s. per fortnight for each of the younger children up to three in number. The actual rate payable in any case is determined after taking into consideration all other income and property (apart from the home) received or owned by the pensioner, and no service pension can be paid in any case where such other income and/or property exceeds certain specified limits. The allowed income is variable according to the cost of living, the amount at 26th August, 1943, being £102 14s. per annum for a single man and £205 8s. per annum in the case of a member and his wife. The allowed property maximum is £400 for each person.

If the income from all other sources is less than the annual amounts shown above, service pension become payable at such rate as will, with that other income, bring the total income of the pensioner (including service pension) up to the allowed maximum, provided, of course, that the pension cannot exceed the maximum rate specified for the particular case.

A female member of the forces was made eligible in 1936 for consideration of a service pension if she embarked for service abroad, previously she must have served in a theatre of war. In the same year an institutional rate of service pension not exceeding 12s. per fortnight was made available. This pension, rate at 26th August, 1943, was 19s. per fortnight, and benefited particularly inmates of mental asylums, who were previously excluded from the scheme.

Eligibility for service pensions may be established on the following grounds :—

- (a) Sixty years of age or more, provided the applicant served in a theatre of war, but eligibility on this ground applies only to the ex-soldier and not to his wife or children. In the case of a female member of the forces, the qualifying age is 55 years, and service abroad, not necessarily in a theatre of war, is sufficient.



- (b) Permanently unemployable, provided the applicant served in a theatre of war (or, in the case of a female member, served abroad). Under this class pensions may be paid to the ex-soldier, his wife and children—up to four in number.
- (c) Pulmonary tuberculosis, whether the applicant served in a theatre of war or not. Under this class also pensions are payable to the wife and children—up to four in number.

Only those applicants who qualify under Class (c) are entitled to receive both service and invalid pensions at the same time.

During the year 1941-42 the scheme was extended to veterans of the South African War 1899-1902, and by amending legislation in 1943 was further extended to members of the Forces of the present war.

2. Operations during Year.—The following figures give the important facts of the service pension scheme during 1942-43 :—

Claims granted during the year—

Members of the Forces	..	..	..	..	1,050
Wives	..	..	..	..	375
Children	..	..	..	..	253
					1,678

Claims rejected during the year—

Members of the Forces	..	..	..	..	524
Wives	..	..	..	..	270
Children	..	..	..	..	286
					1,080

Pensions cancelled or discontinued during the year	..	..	2,615
Deaths of pensioners during year	..	..	628
Pensions in force at 30th June, 1943	..	..	13,284
Annual pension liability on 30th June, 1943	..	..	£658,122
Expenditure, 1942-43	..	..	£660,109

3. Number of Service Pensioners and Expenditure.—The following table shows the number of service pensions in force and the expenditure since 18th January, 1936, when the scheme came into operation :—

SERVICE PENSIONS—SUMMARY, AUSTRALIA.

Year ended— 30th June—	Pensions in Force—					Total.	Amount Paid in Pension.
	Old-age Members of Forces.	Permanently Unemployable.		Suffering from Pulmonary Tuberculosis.			
		Members of Forces.	Dependants.	Members of Forces.	Dependants.		
	No.	No.	No.	No.	No.	No.	£
1936 ..	1,257	679	1,095	332	485	3,848	31,135
1937 ..	2,256	1,990	3,028	462	753	8,489	221,714
1938 ..	2,805	2,712	3,918	544	872	10,851	329,871
1939 ..	3,397	3,393	4,667	619	1,032	13,108	407,127
1940 ..	3,858	3,706	4,814	623	999	14,000	472,263
1941 ..	4,008	3,705	4,734	655	979	14,081	511,103
1942 ..	4,294	3,772	4,591	650	939	14,246	579,656
1943 ..	4,270	3,695	4,221	452	646	13,284	660,109

#### § 4. Medical Treatment of Returned Soldiers Suffering from War Service Disabilities.

At 30th June, 1943, there were 2,078 in-patients, including a number whose care was undertaken by the Repatriation Commission on behalf of other countries or Commonwealth Departments. There were 138,882 out-patient attendances for treatment during the year, excluding treatments by the 795 Local Medical Officers resident in country towns. The expenditure to 30th June, 1943, was £11,472,135.

#### § 5. Miscellaneous.

1. *Summary of Other Departmental Activities.*—The following is a summary of the work of the Repatriation Commission from 8th April, 1918, to 30th June, 1943:—

(i) *Employment.* Number of applications, 264,520; number of positions filled, 140,709.

(ii) *Vocational Training.* Number of men completed training, 27,724; number in training, 68.

(iii) *Soldiers' Children Education Scheme.* From the inauguration of the scheme in February, 1921, up to 30th June, 1943, 27,354 applications for assistance had been received. Of these, 25,712 had been approved, of which 18,774 recipients of benefits had completed their training and 4,368 were undergoing training, while 78 applications were pending and the remainder had been refused or withdrawn.

Up to 30th June, 1943, the expenditure was £2,403,926.

(iv) *Assistance Granted.* The total expenditure incurred apart from war and service pensions during the period from 8th April, 1918, to 30th June, 1943, was £25,294,789, of which £1,676,511 represented loan and £23,618,278 general expenditure. Of the total, the largest amounts were absorbed by medical treatment with £11½ million, vocational training with £5 million, and expenses of providing employment, £2½ million.

By amending legislation passed since the outbreak of the present war, the provisions relating to existing general benefits were applied in respect of soldiers engaged in this war, and new benefits designed for their re-establishment after discharge from the Forces were made available. The new benefits are placement in employment; payment of sustenance while awaiting employment; provision of tools of trade to those to whom such tools are deemed necessary to the exercise of their calling; supplementation of wages of apprentices whose apprenticeships have been interrupted by war service; and provision of free passage to Australia for the wives and children of soldiers who, during the war, have married abroad.

2. *Expenditure of Repatriation Commission.*—The expenditure of the Commission for the year ended 30th June, 1943, was £10,171,301, distributed as follows:—

Repatriation benefits—						£
Loans to soldiers	..	..	..	..	..	360
Grants to soldiers and general expenditure (including maintenance of training schools, medical institutions, etc.)	..	..	..	..	..	727,085
Assistance to soldiers in necessitous circumstances	..	..	..	..	..	1,207
Allowances to dependants of soldiers not provided for under the Act	..	..	..	..	..	844
						<hr/> 729,496
Soldiers' Children Education Scheme	..	..	..	..	..	79,061
War and Service Pensions	..	..	..	..	..	9,007,808
Administrative costs—						£
Salaries	..	..	..	..	..	286,075
Contingencies	..	..	..	..	..	68,861
						<hr/> 354,936
<b>Total</b>	..	..	..	..	..	<hr/> <b>10,171,301</b>

3. *Losses on Soldier Settlement.*—Reference to losses incurred in connexion with settlement of returned soldiers and sailors will be found in Chapter IV., "Land Tenure and Settlement."

## CHAPTER XI.

### THE TERRITORIES OF AUSTRALIA.

#### GENERAL.

The Territories under the control of Australia are : The Northern Territory ; the Australian Capital Territory ; Papua (formerly British New Guinea) ; Norfolk Island ; the Territory of New Guinea (by Mandate of the League of Nations) ; Nauru (under joint Mandate of the Commonwealth, Great Britain and New Zealand) ; the Territory of Ashmore and Cartier Islands : and the Australian Antarctic Territory.

The results of the census of the Territories at 30th June, 1933, may be found in the separate Census bulletins and parts published by this Bureau.

In each of the external Territories Australian currency is used. In the Territory of New Guinea, however, Australian coins are being replaced by local coins consisting of silver shillings, cupro-nickel sixpences and threepences, and bronze pennies.

#### THE NORTHERN TERRITORY.

##### § 1. Area and Population.

1. *Introductory.*—Upon the extension of New South Wales westward to the 129th meridian in 1825, the Northern Territory was incorporated in that colony, but in 1863 was annexed by Royal Letters Patent to the province of South Australia. With the adjacent islands it was transferred to the Commonwealth on 1st January, 1911. The total area is 523,620 square miles, or 335,116,800 acres.

2. *Population.*—(i) *Europeans.* At the census taken in 1881 there were only 670 Europeans in the Territory. The number increased slowly, reaching its maximum in 1918 with 3,767 persons. At the census of 1933 the white population had decreased to 3,306. This number, however, was 34.5 per cent. greater than the figure at the census of 1921.

(ii) *Non-Europeans.* The number of full-blood non-Europeans, excluding Australian aborigines, in the Northern Territory on 30th June, 1933, was 744, of whom 462 were Chinese, the remainder being mainly Filipinos (69), Japanese (91), and Malays (59). There were at one time over 4,000 Chinese in the Territory.

The half-caste population recorded at the census of 1933 numbered 800 of whom 743 were half-caste Australian aborigines.

(iii) *Total Population.* The estimated population at 31st December in each of the last five years is given in the following table :—

NORTHERN TERRITORY : POPULATION (EXCLUDING ABORIGINES).

Year.			Males.	Females.	Total.
1938	..	..	3,285	1,820	5,645
1939	..	..	4,231	1,981	6,212
1940	..	..	4,258	2,041	6,299
1941	..	..	4,078	1,492	5,570
1942	..	..	3,972	980	4,952

The Census population (30th June, 1933) was 3,378 males, 1,472 females, total 4,850.



(iv) *Movement of Population.* The following is a summary of the movement of population in 1942 (excluding road migration):—

## NORTHERN TERRITORY : MOVEMENT OF POPULATION, 1942.

Arrivals ..	59	Departures ..	686	Excess of departures over arrivals ..	627
Births ..	92	Deaths .. ..	83	Excess of births over civilian deaths	9
Increase ..	151	Decrease ..	769	Net Decrease (a)	618

(a) Includes deaths of Defence personnel.

The migration figures for the Territory during the five years ended 1942 are shown in the following table:—

## NORTHERN TERRITORY : MIGRATION.

Year.				Arrivals.	Departures.
1938 ..	..	..	..	2,601	2,343
1939 ..	..	..	..	1,687	1,170
1940 ..	..	..	..	288	288
1941 ..	..	..	..	445	1,268
1942 ..	..	..	..	59	686

(v) *The Aborigines.* A special article contributed by Dr. W. Ramsay-Smith on the subject of the Australian aborigines was incorporated in Official Year Book No. 3 (p. 158). The Chapter "Population", in Official Year Book No. 17, contained information regarding the number and distribution of aborigines and the measures taken by the States (in the case of the Northern Territory, by the Commonwealth) to protect them and to conserve their interests. Large numbers of the aborigines in the Territory are still outside the influence of Europeans. The total number of full blood and half-caste aborigines at 30th June, 1941, was estimated at 14,488, of whom 3,150 were in regular employment. There are fifteen "aboriginal" reserves, comprising an area of 67,244 square miles. (See also Chapter XII. "Population".)

## § 2. Legislation and Administration.

On 1st January, 1911, the Territory was transferred by South Australia to the Commonwealth. The terms are outlined in Official Year Book No. 15, p. 940. By the Northern Australia Act 1926, the Territory was divided into two parts, Central Australia and North Australia, separated by the 20th parallel of south latitude, each administered by a Government Resident. In addition, Advisory Councils and a Development Commission were provided for. The Act of 1926 was repealed by the Northern Territory (Administration) Act 1931. The administration of the Territory was placed in the hands of an Administrator, residing at Darwin, assisted by a Deputy Administrator, residing at Stuart (Alice Springs). The designation of the latter office was later changed to that of District Officer. The Governor General is empowered to make ordinances having the force of law in and in relation to the Territory, subject to disallowance by either House of the Commonwealth Parliament. The Territory elects a member to the House of Representatives, who may take part in debates, but may not vote, except on a motion for the disallowance of any ordinance of the Northern Territory or on any amendment of any such motion.

### § 3. Physiography.

1. **Tropical Nature of the Country.**—The Territory is within the torrid zone, with the exception of a strip  $2\frac{1}{2}$  degrees wide which lies south of the Tropic of Capricorn.

2. **Contour and Physical Characteristics.**—The low flat coast-line seldom reaches a height of 100 feet. Sandy beaches and mud flats, thickly fringed with mangroves, prevail. Sandstone, marl and ironstone form the occasional cliffy headlands. The sea frontage of more than 1,000 miles is indented by bays and inlets and intersected by numerous rivers, many of which are navigable for considerable distances from their estuaries.

The principal features of the coast-line are enumerated in Official Year Book No. 1, p. 66; the rivers in No. 2, p. 76; the mountains in No. 3, p. 67; the lakes in No. 4, pp. 77, 78; the islands in No. 5, pp. 71, 72; and the mineral springs in No. 6, p. 65.

Inland, the country generally is destitute of conspicuous landmarks. From the coast there is a general rise southwards to the vicinity of the 17th or 18th parallel of south latitude, where the higher lands form the watershed between the rivers that flow northwards to the sea and those that form the scanty supply of the interior systems. Towards the centre of the continent the land over a wide area is of considerable elevation, and there are several mountain ranges, generally with an east and west trend.

### § 4. Climate, Fauna and Flora.

1. **The Seasons.**—There are two main climatic divisions—the wet season, November to April, and the dry season, May to October, with uniform and regular changes of weather. Nearly the whole of the rainfall occurs in the summer months. Fuller particulars appear in Official Year Book No. 6, p. 1116.

2. **Fauna.**—The ordinary types of native Australian fauna inhabit the Territory. As elsewhere on the continent, the higher *Theria* are rare, but marsupials, birds, crocodiles, fresh-water tortoises, snakes (mostly non-venomous) and frogs abound. There are many varieties of freshwater fish and littoral mollusca. Butterflies and beetles are strongly represented. The white ant is a pest, anthills in the Territory sometimes attaining great dimensions. Mosquitoes and sandflies are very troublesome, particularly in the wet season. Native fauna are in some cases protected. Buffalo formerly existed in large herds, but their number has been greatly reduced by indiscriminate shooting.

3. **Flora.**—The vegetation is North Australian in type, but a number of the forms belong to the Malayan and Oceanic regions. The timber trees are not of great commercial value, but in the coastal regions tropical vegetation grows luxuriously to the water's edge. On the wide expanses of plain country in the interior there is little vegetation, the principal orders represented being:—*Euphorbiaceae*, *Compositae*, *Convolvulaceae*, *Rubiaceae*, *Goodenoviaceae*, *Leguminosae*, *Urticaceae*.

Fuller particulars regarding fauna and flora are given in Official Year Book No. 6, pp. 1116–7.

### § 5. Production.

1. **Area.**—At 30th June, 1942, there were 208,685 square miles held under lease, licence and permit in the Northern Territory, comprising 164,945 square miles of pastoral leases, 696 square miles of pastoral permits, 39,833 square miles of grazing licences, 116 square miles of agricultural leases and 3,094 square miles of miscellaneous leases.

2. **Agriculture.**—Up to the present agriculture has made little progress in the Territory, although it has been proved that rice, tobacco, coco-nuts, mangoes, bananas, cotton, various fodder plants, and peanuts can be successfully grown. Expense of harvesting is, at present, an obstacle to the economic production of rice, and until labour-saving machinery is procured it cannot be produced with profit. There is a large stretch of first-class coco-nut land on the coast, but hitherto planting has not been attempted on a commercial scale. For the encouragement of primary production a Primary Producers' Board was established in 1931. There was little activity in agriculture during 1940-41 and the outlook was not hopeful. It is hardly practicable to develop agricultural production in the sub-tropical district around Darwin, and the history of efforts in this connexion is one of almost complete failure.

3. **Pastoral Industry.**—The pastoral possibilities of certain parts of the Northern Territory were recognized at an early date, and in 1866 stock was brought into the Macdonnell Range country from South Australia. Six years later cattle were moved from Queensland to the northern parts of the Territory, and in 1879 Giles reached the Katherine River with 2,000 head of cattle and 12,000 sheep from South Australia. For various reasons sheep-raising did not succeed. The cattle industry however progressed steadily. The number of cattle exported by land from the Northern Territory during 1940-41 was about 81,500. In the southern portion of the Territory, the rainfall was above the average and was evenly distributed throughout the year, and a favorable season was again experienced. In the north, seasonal conditions varied considerably, while in the Darwin and Gulf District conditions were unfavorable and the late rains found the cattle in poor condition.

The estimated number of live stock in the Territory in the last five years is given in the table hereunder:—

NORTHERN TERRITORY : LIVE STOCK.

Year.	Horses.	Cattle.	Sheep.	Pigs.	Goats.	Camels.	Donkeys.	Mules.
1938 ..	33,191	899,472	29,901	355	19,427	162	1,323	443
1939 ..	32,721	922,581	38,587	483	20,335	331	1,443	366
1940 ..	30,716	922,308	33,703	407	18,193	323	1,262	455
1941 ..	26,209	892,881	28,245	418	(b)	(b)	(b)	(b)
1942 (a) ..	43,663	978,434	34,603	532	(b)	(b)	(b)	(b)

(a) 31st March, 1943.

(b) Not available.

4. **Mining.**—(i) *General.* Alluvial gold-digging in the Northern Territory commenced in 1869, and up to the end of 1880 gold to the value of £79,022 had been produced. In 1881 the gold production reached its maximum, the value for that year being £111,945. During the following years it fluctuated considerably, but as long as the alluvial deposits lasted the output was satisfactory. In the transition period from alluvial to reef mining the industry declined considerably. The production of metals other than gold has suffered on account of the vagaries of prices, and the high cost of transport and of white labour. Owing to the exceptionally high price the search for gold has been stimulated in recent years and production has increased annually. The principal producer of gold is the Tennant Creek field which gives every indication of increasing production for a number of years. Although the mica deposits in the Territory are not exploited systematically or on a large scale, a number of men have been engaged in this class of mining and during 1941 produced £12,133 worth of mica. Production of wolfram concentrates increased during the year, the value of the output was £52,326.

(ii) *Mineral Production.* The following table shows the value of mineral production for the five years ended 1941.



## NORTHERN TERRITORY : MINERAL PRODUCTION.

Year.	Gold.	Tin Ore.	Silver-lead Ore.	Copper Ore.	Mica.	Wolfram.	Tantalite.	Total Value all Minerals.
	£	£	£	£	£	£	£	£
1937 ..	100,462	7,205	328	55	12,524	84,832	445	205,851
1938 ..	109,168	3,205	..	4,362	19,712	78,277	..	214,724
1939 ..	163,414	4,487	..	2,248	15,539	58,183	..	244,478
1940 ..	238,849	4,533	..	1,072	17,670	47,828	..	311,024
1941 ..	201,599	4,041	..	3,185	12,133	52,326	12	274,172

The value of all minerals produced to the end of 1941 was approximately £4,453,000.

In 1934 the Governments of the Commonwealth and the States of Queensland and Western Australia agreed to co-operate in the conduct of a geological and geophysical survey of certain areas in the northern parts of Australia, including the Northern Territory. More detailed reference to the survey and its progress will be found in Chapter XX. "Mineral Industry".

5. Pearl, Bêche-de-Mer, and Other Fisheries.—In 1884 mother-of-pearl-shell was discovered in the harbour of Port Darwin. Difficulty in working, principally through heavy tides and muddy water, retarded the development of the industry for many years. The production of pearl-shell has declined rapidly over the past three years. The production for 1939-40 amounted to only 179 tons, valued at £14,350, compared with 804 tons, £67,000, in 1937-38 and 410 tons, £31,500, in 1938-39. The depleted condition of the known beds and the depressed market were responsible for fewer Japanese vessels competing with local vessels during the year.

Three fishing licences and two boat licences were issued during 1938-39 in connexion with bêche-de-mer fisheries. Prices were not remunerative, however, and the production was valued at only £252.

Darwin continues to provide a firm and ready local market for fish. The lack of suitable refrigerating plants on the fishing-boats is responsible for the deficiency of regular supplies of fish except in limited quantities obtained from traps close to the town.

## § 6 Land Tenure.

A description of the system of land tenure in force in the Territory will be found in Chapter V. "Land Tenure and Settlement", Official Year Book No. 22.

## § 7. Commerce, Shipping and Air Services.

1. Trade.—No record is kept of the trade between the States and Territories. The value of the direct oversea imports and exports for 1901 and for the years 1936-37 to 1940-41 is given hereunder :—

## NORTHERN TERRITORY : OVERSEA IMPORTS AND EXPORTS.

Items.	1901.	1936-37.	1937-38.	1938-39.	1939-40.	1940-41.
	£	£	£	£	£	£
Imports (a) ..	37,539	58,120	44,703	29,406	61,691	84,694
Exports (b) ..	29,191	26,645	6,053	12,729	12,814	24,865

(a) British currency values.

(b) Australian currency values.

2. **Shipping.**—The Territory is dependent for its shipping facilities chiefly on the services of vessels trading between Melbourne and Singapore. In addition to pearlers and other small craft, larger vessels make occasional visits, while a sixty-days' service between Fremantle and Darwin is carried out by the *Koolinda*, belonging to the Western Australian State Shipping Service.

#### NORTHERN TERRITORY : SHIPPING.

Year.	Arrivals.		Departures.	
	No. of Vessels.	Tonnage.	No. of Vessels.	Tonnage.
1934-35 .. ..	58	108,306	47	108,909
1935-36 .. ..	55	117,757	55	117,757
1936-37 .. ..	100	125,840	104	122,505
1937-38 .. ..	99	122,960	101	122,961
1938-39 .. ..	161	181,961	172	179,422

The foregoing figures exclude particulars of coastwise shipping. During 1938-39 fourteen vessels of 285 tons net were entered at Darwin as coastwise. Later particulars are not available for publication.

3. **Air Services.**—Darwin is the first port of arrival in Australia of aircraft from Europe, Singapore and Netherlands East Indies. The air services calling at Darwin at 30th June, 1941, were as follows :—Qantas Empire Airways Ltd., under contract to the Commonwealth Government, operated the Sydney-Darwin-Singapore section of the Empire Flying Boat Service with a twice weekly service in each direction. The MacRobertson-Miller Aviation Co. Ltd. operated a twice weekly service in each direction between Perth and Darwin, linking up with the Qantas service at the latter point. Guinea Airways Ltd. operated a twice weekly service in each direction between Adelaide and Darwin, and the K.N.I.L.M. Company, which extended their Amsterdam-Batavia air route to Sydney via Darwin in 1938 operated a weekly service in each direction. On the average seven machines arrived at and departed from Darwin during each week.

### § 8. Internal Communication.

1. **Railways.**—Under the agreement made between the Commonwealth and the State of South Australia for the transfer of the Northern Territory, which was ratified by the Northern Territory Acceptance Act 1910, the Commonwealth is to construct the Northern Territory portion of the transcontinental railway line (connecting Adelaide and Darwin, via Port Augusta).

The Northern line from Adelaide terminated at Oodnadatta, about 100 miles south of the southern boundary of the Territory, but has been extended to Alice Springs, an addition of 292 miles. The line from Darwin to Katherine River, about 200 miles, has been extended as far as Birdum, 316 miles from Darwin. The completion of the remainder of the gap would give access to broad belts of pastoral and mineral country towards the centre of Australia. The Commonwealth Government acquired on 1st January, 1911, the property in the line from Port Augusta to Oodnadatta (478 miles), and on 1st January, 1926, the control thereof was transferred to the Commonwealth Railways Commissioner.

2. **Posts.**—Postal communication is maintained by vessels belonging to Burns, Philp and Co. Ltd., which carry on a monthly service between the Territory and the Eastern States. In addition, the vessels belonging to the State Steamship Service of Western Australia give a service once every 60 days between Fremantle and Darwin. Mail is carried between Sydney and Darwin by the Qantas Empire Airways Ltd., and

between Perth and Darwin by the MacRobertson-Miller Aviation Co. Ltd. Inland, the northern part of the Territory receives its mail via Darwin or by means of the aerial services, and the southern districts are served via Adelaide.

3. Telegraphs.—The transcontinental telegraph line, covering a length of 2,230 miles, was completed on 22nd August, 1872, at a cost of nearly £500,000. The line runs in a northerly direction from Adelaide to Darwin, whence telegraphic communication is provided with Asia and Europe, via Banjoewangie (Java), Singapore and Madras. Between Darwin and Banjoewangie the submarine cable is duplicated.

High-power wireless stations have been constructed by the Commonwealth Government at Wave Hill in the Territory, and at Camooweal, just over the eastern boundary, in Queensland.

### § 9. Finance.

In the Commonwealth finance statement separate accounts are given for Northern Territory administration. Revenue and expenditure for 1941-42 are given below:—

#### NORTHERN TERRITORY: REVENUE AND EXPENDITURE, 1941-42.

REVENUE.	£	EXPENDITURE.	£
Taxation—		Territory administration ..	233,555
Customs and excise ..	12,945	Developmental services ..	70,802
Sales tax .. ..	7,433	Postmaster-General's Department ..	47,228
Land and income tax ..	69,142	Other departments ..	46,058
Probate and stamp duties	1,886	Rent, repairs, maintenance ..	68,692
Pay-roll Tax .. ..	5,737	New works .. ..	338,079
Medical Benefits Tax ..	16,406	Interest .. ..	65,578
Railways—		Sinking fund .. ..	16,257
North Australia .. ..	305,448	Unemployment relief ..	2,515
Central Australia .. ..	742,144	Shipping subsidy .. ..	6,500
Posts, telegraphs and telephones .. ..	83,449	Railways—	
Territorial .. ..	33,199	Working expenses .. ..	697,498
Miscellaneous .. ..	73,031	New works .. ..	20,597
Deficiency on year's transactions .. ..	590,969	Interest .. ..	268,276
		Sinking fund .. ..	60,154
Total .. ..	1,941,789	Total .. ..	1,941,789

### AUSTRALIAN CAPITAL TERRITORY.

1. Introductory.—In Official Year Books Nos. 4 and 5, information was given in Section XXXI., in regard to the events leading to the selection of the Australian Capital Territory and the necessary legislation and the progress of operations in connexion with the establishment of the capital city. The physiography of the Territory was dealt with extensively and topographical and contour maps accompanied the letterpress, as well as reproductions of the premiated designs for the laying out of the city. Considerations of space, however, preclude the repetition of this information. On 12th March, 1913, the official ceremony to mark the initiation of operations in connexion with the establishment of the Seat of Government was carried out. At this ceremony the selection of "Canberra" as the name of the capital city was announced. The Seat of Government Acceptance Act 1938 provides that the Territory shall be known as the Australian Capital Territory. (A special article contributed by Dr. F. Watson, entitled "Canberra Past and Present", appears on p. 454 of Official Year Book No. 24).



2. **Transfer of Parliament.**—On 9th May, 1927, Parliament House at Canberra was officially opened by His Royal Highness Albert, Duke of York, the occasion being the 26th anniversary of the opening of the first Parliament of the Commonwealth at Melbourne by His Royal Highness George, Duke of Cornwall and York—afterwards His Majesty King George V—on 9th May, 1901. (For particulars of the opening ceremony see Official Year Book No. 21, p. 604).

3. **Administration.**—In Official Year Book No. 18, a summary is given of the development of the administration prior to the taking over of the control of the Territory by the Federal Capital Commission, and in Official Year Book No. 22, a summary is given of the administrative activities of the Federal Capital Commission.

The administration of the Territory by the Federal Capital Commission was continued until 30th April, 1930, when the Seat of Government (Administration) Act 1924-1929 was repealed, and the powers and functions of the Commission reverted to the Government.

Since April, 1932, the general control of the Territory has been exercised by the Minister for the Interior, but the specific services undertaken by the Department of Health and the Attorney-General's Department are being continued by those Departments.

4. **Progress of Work.**—The general progress of the work of construction up to the time the Territory was taken over by the Commission is outlined in Official Year Book No. 18. Later progress under the Commission is described in Official Year Book No. 22.

During 1941-42, 144 and in 1942-43, 24 residences were completed.

In previous issues of the Official Year Book a synopsis of the works completed during the year were given, but for reasons of economy has been omitted from this issue.

5. **Forestry.**—A considerable amount of reafforestation work has been undertaken, and plantations have been established at Uriarra, Mount Stromlo, Pierce's Creek and Kowen. Experimental plots have also been established in the Brindabella mountains and silvicultural work is being carried out at Black Mountain.

The total area of plantations to 30th June, 1943, was 13,600 acres. Forestry operations were begun on Mount Stromlo in 1915, and up to 1925 approximately 700 acres had been planted with pine and other trees. The plantings up to this time were chiefly on aesthetic lines, but since the initiation of the wider programme, arrangements have been made for pruning and thinning, and sawmill timber is now being obtained from the logs resulting from thinning operations. The output of sawmill logs from thinnings is gradually improving and has increased from 21,762 super. feet in 1930-31 to about 1,200,000 super. feet in 1942-43.

In 1926 a comprehensive review was undertaken of the Territory's potentialities in regard to forest development. A system of forestry management was instituted in the existing forest areas, and a considerable amount of survey and assessment work has been completed. *Pinus radiata* has been most extensively planted, and also, as a result of experimental work, pinus areas of better quality pines on a longer rotation, such as *Pinus ponderosa* and *laricio* have been planted during recent years, but *Pinus radiata* remains the principal species.

6. **Lands.**—(i) *In the Australian Capital Territory.* Reference has been made in previous issues of the Official Year Book to the general conditions of land tenure in the Australian Capital Territory and to the area of alienated and leased land.

As considerable portions of the Territory lands are not required in connexion with the establishment of the city, large areas have been leased under special improvement conditions in regard to the extermination of noxious weeds and the destruction of rabbits and other pests. The lands are classified into three grades of agricultural and three grades of grazing land. About 303,967 acres comprising 454 leases are at present held under lease for periods varying from quarterly tenure to 25 years.

Auction sales of city leaseholds are described in Official Year Book No. 22, p. 599.

Five leases under the Church Lands Leases Ordinance 1924-1932, which require the lessees to submit a definite building programme within a specified period, and one lease under the Church of England Lands Ordinance 1926 have been granted for church

purposes. A further eight leases under the Leases (Special Purposes) Ordinance 1925-1943 and two leases under the Leases Ordinance 1918-1937 have been granted for church and scholastic purposes.

The total number of leases granted under the City Area Leases Ordinance, excluding surrendered leases, at the end of the financial year 1942-43 was 547, representing a capital value of £235,373. During the year 13 new leases were granted. The number of business and residential blocks surrendered to or determined by the Commonwealth to the end of the year was 292.

Under the terms of the City Area Leases Ordinance 1936-1938 each block is leased for a period of 99 years at a rental of £5 per cent. per annum of the unimproved capital value as assessed by the Commonwealth or bid at auction. In conformity with the general reduction of interest in consequence of the financial crisis rentals under this Ordinance have been reduced to 4 per cent. of the unimproved capital value until 31st December, 1944.

(ii) *In the Jervis Bay Territory.* The Commonwealth acquired from the State of New South Wales sovereign rights over the area comprising about 28 square miles of land and water at Jervis Bay for possible use as a port in connexion with the Australian Capital. The Royal Australian Naval College was established in this area on a site known as Captain's Point, but was removed in 1930 to Flinders Naval Base, Victoria. Leases have been granted over an area of 12,812 acres in the Jervis Bay Territory.

7. *Railways.*—Canberra is connected with the railway system of New South Wales by a line  $4\frac{1}{2}$  miles long to Queanbeyan. This line was opened for goods traffic on 25th May, 1914, and for passenger traffic on 15th October, 1923. The railway terminus is situated in the area known as Kingston.

A direct passenger service is in operation connecting Canberra with Sydney and Melbourne, and trains leave both cities for Canberra daily. Improved facilities for goods traffic have also been provided.

8. *Population.*—The census return of population on 30th June, 1938, was 11,290 in the Australian Capital Territory and 272 in the Jervis Bay Territory, or a total of 11,562 persons. The estimated population at 30th June, 1943, was 14,115.

9. *Live Stock.*—The numbers of live stock depastured at 31st March, 1943, were—Horses, 1,143, cattle, 6,967, sheep, 250,344, and pigs, 779.

10. *Educational Facilities.*—Arrangements have been made with the New South Wales Education Department to continue the administration of education in the Territory, the expenditure involved being refunded annually to the State. There are eleven schools in the Australian Capital Territory and two in the Jervis Bay Territory. The largest primary school is situated at Telopea Park, Barton, with accommodation for 750 scholars. Secondary education is provided at the Canberra High School, Acton. It has accommodation for 550 scholars, and its curriculum provides a standard of education comparable in range of subjects with that provided at the Government High Schools in New South Wales. The School also provides for Commercial and Junior Technical Classes, and there is an Evening Continuation School attached with Evening Commercial and Matriculation Classes. To meet the increased demand for Secondary education, super primary classes have been established at Telopea Park School.

The Canberra Technical College at Kingston is provided with modern equipment for supplementary courses for apprentices, journeymen desirous of improving their trade qualifications, and for others who desire to take any special courses.

There are at present four private schools in the Territory. The Canberra Grammar School, the Canberra Church of England Girls' Grammar School, and St. Christopher's Convent School provide for primary and secondary education, and St. Patrick's School provides primary and sub-primary education.

Reference to the establishment of the Canberra University College will be found in Chapter VI. "Education".

11. Finance.—(i) *Financial Year 1941-42.* Receipts and Expenditure for the financial year 1941-42 are given in the following table:—

## AUSTRALIAN CAPITAL TERRITORY : RECEIPTS AND EXPENDITURE, 1941-42.

Receipts.		Expenditure.				
Items.	Amount.	Items.	Capital.	Main-tenance.	Other.	Total.
	£		£	£	£	£
Rent and rates ..	215,213	Architectural services ..	131,637	28,538	..	160,175
Electricity ..	59,128	Engineering services ..	204,253	112,654	..	316,907
Motor registration and fees ..	11,887	Lands, Forestry ..	9,726	..	14,056	23,782
Hospital tax ..	14,235	Loans for housing, net ..	Cr. 7,405	..	..	Cr. 7,405
Hotels ..	26,950	Sundry works and services ..	4,676	40,066	1,835	46,577
Transport and City Bus Service ..	116,768	Plant, etc.—Works ..	12,134	..	..	12,134
Sales of goods, manufactured products, etc. ..	290,864	Plant, etc.—Transport ..	15,590	..	..	15,590
Housing ..	31,598	Education ..	..	..	57,375	57,375
Miscellaneous ..	79,815	Hospital—Working expenses ..	..	..	18,250	18,250
		Interest and Sinking Fund ..	..	..	288,311	288,311
		Administrative ..	..	..	93,375	93,375
		Hotels—Working expenses ..	..	..	27,050	27,050
		Transport and City Bus Service—Working expenses ..	..	..	95,877	95,877
		Factory Stores, etc.—Working expenses ..	..	..	314,543	314,543
		Housing ..	..	..	24,890	24,890
		Miscellaneous—Police, Fire Brigade, etc. ..	..	..	42,380	42,380
Total Receipts ..	846,458	Total Expenditure ..	370,611	181,258	977,942	1,529,811

(ii) *From 1901-2 to 30th June, 1942.*—The total receipts and expenditure from 1901-2 to 30th June, 1942, were as follows:—

## AUSTRALIAN CAPITAL TERRITORY : RECEIPTS AND EXPENDITURE TO 30th JUNE, 1942.

Receipts.		£	Expenditure.		£
Commonwealth Treasury—			Lands ..	..	907,915
Parliamentary Appropriations—			Engineering works ..	..	4,937,248
Revenue ..	..	7,103,764	Architectural works ..	..	3,665,694
Loan ..	..	5,803,573	Other capital expenditure, sundry debtors, etc. ..	..	1,180,645
					10,691,502
			Seat of Government Establishment Account, being maintenance and administration less revenue: expenditure of a capital nature for which assets no longer exist; profit and loss accounts of trading activities, etc. ..	..	2,215,835*
Total Receipts ..	..	12,907,337	Net Expenditure ..	..	12,907,337

\* Excludes interest, £3,743,267 net.

The foregoing table was prepared by the Department of the Interior and excludes part cost of National Buildings—Parliament House, the Secretariats, etc., Federal Highways within the Territory, Queanbeyan-Canberra Railway and Housing Loan, etc., and Loans for Housing, £2,319,310.

## NORFOLK ISLAND.

1. *Area, Location, etc.*—Norfolk Island, discovered by Captain Cook in 1774, is situated in latitude 29° 3' 45" South, longitude 167° 56' 29" East. Its total area is 8,528 acres, the island being about 5 miles long and 3 miles wide. From Sydney it is distant 930 miles, and from Auckland, 630 miles. The length of the coast line is 20 miles, and its form that of an irregular ellipse. Except on the south-west, inaccessible cliffs rise from the water's edge. The climate is equable, the temperature ranging between 49°



and 85°, with a mean of 68°. The average annual rainfall is 52 inches. It has been said that the salubrious climate, coupled with the beauty of its land and sea scapes, should render Norfolk Island "the Madeira of the Pacific". The island is visited annually by a number of tourists, and, with improved shipping facilities, this traffic is likely to increase. A tourist bureau has been established on the Island.

2. *Settlement.*—The first colonization, in 1788, was by Lieutenant King, who in H.M.S. *Supply* established a small penal station as a branch settlement of that at Port Jackson. The settlement was abandoned in 1813, and for 13 years thereafter its chief use was as a whaling station and place of call for British warships.

From 1826 to 1855 it was again made a penal station. In 1844 it was annexed to Van Diemen's Land (Tasmania).

The descendants of the *Bounty* mutineers, having become too numerous to subsist on Pitcairn Island, were removed thence to Norfolk Island in 1856. The new community numbered 94 males and 100 females—and were the descendants of British sailors and Tahitian women. The last of these died at Norfolk Island on 1st March, 1943.

3. *Administration.*—In 1856 the island was created a distinct and separate settlement under the jurisdiction of New South Wales. In 1896 it was made a dependency under the Governor of that Colony, and finally by the passage of the Norfolk Island Act 1913 it was accepted by the Federal Parliament as a territory of Australia. From July, 1914 until 1st January, 1929, Norfolk Island was administered by the Department of Home and Territories, and then, until 25th June, 1941, by the Territories Branch of the Prime Minister's Department, but is now administered by the Department of External Territories through an Administrator. An amending measure, the Norfolk Island Act 1935, provided for the establishment of an Advisory Council of eight elected members to advise the Administrator.

4. *Population.*—The population at 30th June, 1943, was 770, consisting of 395 males and 375 females. During 1942-43, 8 births, 14 deaths, and 3 marriages were recorded. The average age of the persons who died was 60 years. Departures from the island exceeded arrivals by 22, the respective figures being departures 47, arrivals, 25.

5. *Live Stock.*—The latest returns of live stock show that in November, 1941, there were on the island 1,624 cattle, 579 horses, 357 sheep and 76 pigs. In addition, there were 3,741 head of poultry.

6. *Production, Trade, etc.*—The soil throughout is good and is specially suitable for the cultivation of bananas, citrus and other fruits. The Canadian Wonder bean seed is one of the staple crops of the island. Since the promulgation of the Ordinance regulating the export of seed the area planted with bean seed has increased. The 1939-40 crop was particularly good, the quantity exported amounting to 1,947 bushels, but, owing to a shortage of local labour due to war conditions, only 373 bushels of seed were grown and exported during the 1942-43 season.

Apart from the bean, agriculture generally has been depressed. A modern pulping factory was erected on the island during 1938 and whilst 82 tons of passion fruit pulp were produced during 1939-40, the quantity of pulp produced during 1942-43 amounted only to 11 tons. The pulping of cherry guavas for jelly has also been experimented with and investigations are being carried out with a view to cultivating flax and ramie.

The citrus trees on the island in full bearing are capable of producing over 3,000 cases of fruit, but owing to previous drought conditions trees have not resumed normal bearing and no fruit was exported during 1942-43, the season's crop being absorbed locally.

A demonstration farm was established in 1938 for the study of crop diseases and suitable farming methods for the island.

Large numbers of whales pass the island throughout the season. However, whaling had not been conducted for a number of years until recently when the industry was revived by the formation of a whaling company. Three boats have been fitted out and

manned by full crews. The preserved fish industry which was established some years ago has been abandoned, and the fish-freezing factory has also ceased operations. Such fish as trevally, kingfish, schnapper and many others abound in the waters around the island.

On 30th June, 1943, the total area of land held under freehold and Crown leasehold amounted to 6,647 acres, consisting of 4,519 acres freehold and 2,128 leasehold.

Imports and exports for the last five years are given hereunder; the values are expressed in Australian currency :—

## NORFOLK ISLAND : IMPORTS AND EXPORTS.

Country.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
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## IMPORTS.

From—		£	£	£	£	£
Australia .. ..	..	27,427	26,056	26,030	20,102	20,256
Pacific Islands ..	..	163	194	56	30	..
Total .. ..	..	27,590	26,250	26,086	20,132	20,256

## EXPORTS.

To—		£	£	£	£	£
Australia .. ..	..	16,110	14,240	10,683	7,374	3,866
New Zealand ..	..	623	541	..	..	..
Pacific Islands ..	..	237	92	71	30	..
Total .. ..	..	16,970	14,873	10,754	7,404	3,866

Duties of Customs are levied on the following goods imported into Norfolk Island for home consumption :—

## IMPORT DUTIES SCHEDULE.

Article.	Unit.	Rate of Duty.	Article.	Unit.	Rate of Duty.
		<i>s. d.</i>			<i>s. d.</i>
Spirits .. ..	pr. gal.	30 0	Chicory .. ..	lb.	0 3
Ale, beer, porter and cider .. ..	gal.	2 6	Petroleum, etc. ..	gal.	0 3
Wine, still—..			Kerosene, etc. ..	..	0 3
Australian .. ..	..	5 0	Residual oil, etc. ..	..	0 3
Other .. ..	..	10 0	Oil, n.e.i. .. ..	..	0 3
Wine, sparkling—			Lubricating oils ..	..	0 3
Australian .. ..	..	15 0	Sugar .. ..	cwt.	3 0
Other .. ..	..	25 0	Molasses, etc. ..	..	2 0
Tobacco, manufactured or unmanufactured—			Biscuits .. ..	lb.	0 1
Australian leaf ..	lb.	2 0	Candles .. ..	..	0 1
Other leaf .. ..	..	4 0	Confectionery ..	..	0 3
Cigars and cigarettes ..	..	6 0	Dried fruits—		
Tea .. ..	..	0 3	Australian .. ..	..	0 1
Coffee .. ..	..	0 3	Other .. ..	..	0 3
			Jams, jellies and pre- serves .. ..	..	0 1

No duties are chargeable on goods imported into Australia from Norfolk Island if the goods (a) are the produce or manufacture of Norfolk Island; and (b) are shipped direct to Australia; and (c) are not goods which if manufactured or produced in Australia would be subject to excise duty.

7. *Communication.*—The “all-red” cable from Great Britain via Vancouver, Fanning Island and Fiji, bifurcates at Norfolk Island, one line connecting with New Zealand, the other with Brisbane.

A shipping service to the Territory is maintained by the vessels of Burns, Philp & Co. Ltd., Sydney, under the terms of the contract with the Commonwealth Government for the maintenance of shipping services to the Pacific Islands.

The journey from Sydney to Norfolk Island occupies four days.

8. *Social Condition.*—Education is free and compulsory up to the age of fifteen years. The school conforms to the Australian standard of public education, ranging from kindergarten to the intermediate certificate, with a two years’ super-primary course of instruction in cultural subjects and in agriculture, woodwork, metalwork, etc. The headmaster and one assistant teacher are lent by the New South Wales Education Department, but they are paid by the Norfolk Island Administration. The number of scholars enrolled at 30th June, 1943, was 114.

The Court of Norfolk Island presided over by a Chief Magistrate is a court of record with dual jurisdiction. Sitting in its Limited Jurisdiction the Court has power to hear and determine actions of claims not exceeding £30 and to punish summarily all crimes and offences involving a pecuniary penalty or a sentence of imprisonment not exceeding six months. In its Full Jurisdiction the Court can hear and determine all actions, punish all crimes and offences, grant probate and letters of administration, hear and determine appeals from any conviction of the Court sitting in its Limited Jurisdiction, and has authority in all other matters. An appeal lies to the High Court of Australia from any judgment, order, decree or sentence of the Court sitting in its Full Jurisdiction.

9. *Finances.*—The whole of the Territorial revenue together with an annual grant from the Commonwealth Government in aid of the administrative expenses is paid to the credit of the Norfolk Island Trust Fund Account, and all administrative and developmental expenses are paid from that account. The operations for 1942-43 were as follows:—

#### NORFOLK ISLAND TRUST FUND ACCOUNT, 1942-43.

Items.	Receipts.	Items.	Expenditure.
	£		£
Balance carried forward ..	2,984	Salaries .. ..	5,369
Commonwealth Grant ..	5,000	Purchase of liquor.. ..	6,120
Customs duties .. ..	4,460	Demonstration farm ..	239
Sale of liquor .. ..	8,992	Repairs and maintenance ..	843
Miscellaneous .. ..	3,901	Miscellaneous .. ..	4,087
		Balance .. ..	8,679
Total .. ..	25,337	Total .. ..	25,337

### PAPUA.\*

#### § 1. General Description.

1. *Early Administration.*—Particulars of the early administration of Papua are given in Official Year Book No. 19, p. 576.

\* Civil Administration in the Territory of Papua was suspended at the close of 11th February, 1942, and military control commenced on 12th February, 1942. Matters relating to the former Civil Administration are dealt with by the Department of External Territories, Canberra. The Minister for External Territories has been empowered by National Security Regulations to exercise the powers and functions of the Administrator, officers and authorities of the Territory.

The Supreme Court of the Australian Capital Territory has been vested with the jurisdiction of the Supreme Court of Papua.



2. **Administration by Commonwealth of Australia.**—The Territory was placed under the authority of the Commonwealth on 1st September, 1906, by proclamation issued in pursuance of Letters Patent of 18th March, 1902, and was accepted by the Commonwealth by the Papua Act 1905, which came into force by virtue of the aforesaid proclamation. The transfer was made under the authority of Section 122 of the Constitution. The Territory is now under the control of the Commonwealth, but not included within it, and is divided into magisterial districts.

Prior to an amendment made in 1940, the Papua Act provided for the appointment of a Lieutenant-Governor to administer the Territory. The office of Lieutenant-Governor was held by Sir Hubert Murray, K.C.M.G., from 1909 until his death in February, 1940. By virtue of the amendment referred to, the Territory is now controlled by an Administrator.

3. **Area, etc.**—Papua lies wholly within the tropics. The northernmost point touches 5° S. latitude; its southernmost portion, comprising Sudest and Rossel Islands, lies between 11° S. and 12° S. latitude. It is separated from Australia by Torres Strait. The length of Papua from east to west is upwards of 800 miles: towards either end the breadth from north to south is about 200 miles, but about the centre it is considerably narrower. The Territory comprises also the islands of the Trobriand, Woodlark, D'Entrecasteaux and Louisiade groups. The length of coast-line is estimated at 3,664 miles—1,728 on the mainland, and 1,936 on the islands. The total area is about 90,540 square miles, of which 87,786 are on the mainland, and 2,754 on the islands. A reference to the physical characteristics of the Territory appears in previous issues of the Official Year Book (see No. 18, p. 633).

## § 2. Population.

The white population of Papua at the census of 30th June, 1941, was 3,070, made up of 2,409 males and 661 females. The numbers recorded in previous years were:—1937, 1,323; 1938, 1,488; 1939, 1,608; and 1940, 1,822.

It is not possible to give exact data regarding the number of natives, because a large area of the interior is not yet under complete Government control. The official estimate is 300,000. Such censuses of the native population as have been taken during recent years point to a slight increase. The coloured population, other than Papuans, on 30th June, 1933, was 786, and included many mission teachers from Samoa, Fiji and other Pacific Islands. On the same date, half-castes, with one of the parents a European, were 227. An Immigration Restriction Ordinance prohibits the immigration of persons who fail to pass the dictation test, or who are of bad character, or likely to become a charge upon the public. Exemptions may, however, be granted by the Administrator to persons of special skill required for employment as overseers or foremen.

## § 3. Native Labour, Taxation, Health, etc.

1. **Native Labour.**—Information regarding the conditions connected with the employment of native labour will be found in Official Year Book No. 22, p. 607.

The number of natives who served under contracts of service for various periods during 1940–41 was 17,168 and the number of non-indentured labourers was 2,900; the latter is of course only estimated.

2. **Native Taxes.**—Under the Native Taxes Ordinance, 1917–1936, a tax not exceeding £1 per annum may be imposed on natives, except native constables, mission teachers, natives unfit for work, and those who have four living children. The proceeds of the tax must be expended on native education, or devoted to purposes directly benefiting the natives.

The taxes collected in 1940–41 amounted to £16,761, of which £5,904 was transferred to the Native Education Fund, and £8,474 to the Native Benefits Fund. The Native Education Fund during 1940–41 disbursed to primary and technical education £4,036, and to agricultural education £1,262, leaving a credit balance of £26,200. From the

Benefits Fund the expenditure included :—Anthropology, £838 ; health, £6,309 ; village improvements, £94 ; family bonus, £1,720 ; games in villages, £12 ; and clerical expenses, £25.

3. **Care of Half-caste Children.**—An Ordinance was passed in 1922 to provide for the care and maintenance of neglected half-caste children. The Ordinance provides that a sum of £26 per annum shall be paid to the Commissioner for Native Affairs by the adjudged father of the child until the child, if a boy, shall reach the age of 16 years, or, if a girl, 18 years.

4. **Health.**—The two principal native hospitals are in Port Moresby and Samarai ; but minor hospitals are attached to the out-stations. Hospitals are also conducted by the various mission societies and plantation companies. The mission societies employ two doctors and a number of trained nurses. Several European medical assistants are employed by the Government. In recent years parties of natives have received a six months course of instruction in first aid and in elementary physics, chemistry, anatomy, physiology and pathology at the School of Public Health and Tropical Medicine, University of Sydney. On their return, the natives are employed as travelling native medical assistants. A training school has been established for this purpose. The chief complaints treated are yaws, ulcers, lung affections, hookworm, venereal and skin diseases. The death rate amongst native labourers was 2.7 per cent. in 1940-41.

## § 4. Land Tenure.

1. **Method of Obtaining Land.**—The broad principles upon which the land laws of Papua are based are (a) no land can be alienated in fee simple ; (b) the rental of the land leased is assessed on the unimproved value of the land, and is subject to re-appraisal at fixed periods. The terms upon which land may be leased are very liberal. Leaseholds of the best class of agricultural land may be obtained for 99 years. No rent is payable during the first ten years of the lease on areas less than 1,000 acres. During the following ten years the rent is charged at the rate of 5 per cent. on the unimproved value of the land. The unimproved value of the land is appraised every twenty years and the rent determined accordingly. If on any appraisement the rent is raised by more than one-third the lessee may disclaim the lease and shall be entitled to receive compensation for his improvements. The unimproved value of agricultural land has been fixed at 5s. per acre. Rent is immediately payable on areas exceeding 1,000 acres, and survey fees on areas exceeding 100 acres.

2. **Crown Lands.**—Private sales of land in the Territory have now ceased. The Government buys from the natives, and then leases to planters, who are forbidden to have direct dealings in land with Papuans. The amount of Crown Land purchased from the natives in 1940-41 was 12,177 acres, and the total to 30th June, 1941, 1,787,783 acres. The tenures under which surveyed areas were held at 30th June, 1941, were leasehold 200,303 acres, and freehold 23,490 acres. The area of leases granted during 1940-41 for agricultural purposes was 9,834 acres most of which was intended for rubber plantations. The low price of copra and the more favorable prospects of rubber have diverted attention to the latter culture. More than 80,000 acres are now held under leases for the cultivation of rubber. Crown rents on leaseholds for 1941 amounted to £7,317.

## § 5. Production.

1. **General.**—The products of the Territory are obtained from its agricultural, timber, fishing, mining and manufacturing industries. Gold is the principal mineral mined, and rubber and copra are the most important amongst plantation products. Portions of the Territory appear well suited for cotton cultivation, and there is a possibility of obtaining petroleum in marketable quantities. Bounties are paid by the Commonwealth Government on cocoa beans and shells, hemp and coir, sago, vanilla beans, bamboos and rattans, spices and kapok produced in the Territory and exported direct to Australia for home consumption.

2. **Agriculture.**—(i) *Soil and Rainfall.* Rich soils at varying elevations and heavy and evenly distributed rainfall favour the cultivation of a variety of tropical products including sugar-cane, coco-nuts, sago palm, bread fruit, dyewoods, spices, ginger, nutmegs, bananas and other fruits. There are large areas of rich alluvial and volcanic soils along the coast, and fertile land is found at elevations up to 6,000 feet. Heavy rainfalls occur, except over a belt of country which runs back from the coast to the hills, and which has its dry season from May to November. This “dry” area is admirably suited for the production of tobacco, fibres, cotton, etc. There are 21 meteorological stations throughout the Territory, and an economic museum and agricultural library have been established.

(ii) *Plantations.* Agricultural settlement has been mostly in the Central and Eastern Divisions with coco-nuts and rubber as the principal crops. The natives are compelled by an Ordinance to plant coco-nuts for food supply. In addition to the coco-nuts in these plantations, many more are planted over small and widely scattered areas by the older natives in accordance with custom. The Native Plantations Ordinance provides for the establishment of plantations in which half of the proceeds is paid to the natives entitled thereto, and the remaining half paid into the Native Education Fund. The following table shows the areas under the different crops during the past five seasons :—

AREA UNDER CULTIVATION.

Crop.			1936.	1937.	1938.	1939.	1940.
			Acres.	Acres.	Acres.	Acres.	Acres.
Coco-nuts	..	..	48,188	45,207	44,719	44,527	44,583
Rubber	..	..	10,270	10,956	12,809	14,494	18,262
Sisal hemp	..	..	150	150	700	700	..
Kapok	..	..	168	119	84	92	85
Coffee	..	..	368	271	248	190	84
Other	..	..	801	933	664	554	595
Total	..	..	59,945	57,636	59,224	60,557	63,609

At 30th June, 1940, the London market price for hot-air dried copra was £13 5s. per ton as compared with £11 7s. 6d. at 30th June, 1939. Rubber at the later date was 13½d. per lb. compared with 8d. per lb. on 30th June, 1939.

(iii) *Government Plantations.* There are two Government plantations, the Orangerie Bay coco-nut plantation and the Kemp Welch rubber plantation, of which the former, having ceased production during 1940-41 owing to the collapse of the copra market, sustained a loss, while the latter reported a net profit on the year's undertakings.

3. **Forestry.**—The principal softwood timber is known as “ilimo,” while among satisfactory timbers of the lowlands are “nara,” “medobi,” and “melila.” There are a large number of woods, varying from the softest to the hardest, including beautiful cabinet woods, but research is necessary to determine their usefulness. The development of a coniferous belt at the higher altitudes offers great possibilities. It is believed that teak and sandalwood are well suited for cultivation.

4. **Live Stock.**—At 31st December, 1940, the live stock in the Territory consisted of 587 horses, 5,994 head of cattle, 87 mules, 1,244 goats, 665 pigs, 30 sheep and 6,320 fowls. The introduction of rabbits, foxes, hares and monkeys is prohibited.

5. **Fisheries.**—Pearl-shell fishing occupies an important place in the industries of Papua. Considerable numbers of luggers are licensed, but the returns are mostly credited to Queensland, whose boundary approaches to within a few miles of the Papuan coast. The species of tortoise which supplies the commercial tortoise-shell is also a native of Papua. Bêche-de-mer and trochus are found along the shores and reefs, and form valuable articles of export.



6. *Mining.*—(i) *Variety of Minerals.* Minerals have been found over a wide range of country. Those discovered so far are gold, copper, tin, lead, zinc, cinnabar, iron, osmiridium, gypsum, manganese, sulphur, graphite, chromite, lignite, platinum and petroleum.

The existence of petroleum has been traced at scattered intervals over a large area. Three companies hold permits under the provisions of the Petroleum (Prospecting and Mining) Ordinance 1938-1939 and oil prospecting is being carried on in the Western, Delta, Gulf and Central Divisions.

Of precious stones, only the topaz and beryl have been obtained. Large beds of apparently good coal also exist.

(ii) *Gold.* Gold was discovered in 1888 and the search gradually spread over every division, finds being reported wherever the explorers went. The estimated quantity in fine ounces and the value of the gold yield for the last five years are given below :—

#### PAPUA : GOLD YIELD.(a)

1936-37.		1937-38.		1938-39.		1939-40.		1940-41.(b)	
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Fine oz.	£	Fine oz.	£	Fine oz.	£	Fine oz.	£	Fine oz.	£
21,605	187,975	25,835	223,160	35,808	325,116	39,422	316,203	10,348	110,501

(a) Valued at average price realized for fine gold in Australia. 1941.

(b) Nine months ended March

Most of the rivers, except those flowing into the Gulf of Papua, have been declared open to gold dredging, and good yields have been obtained. The total value of gold won to 31st March, 1941, was £3,269,021.

(iii) *Copper.* Copper matte to the value of £5,999 was exported during 1940-41. The principal value of this item is its gold content.

(iv) *Other Minerals.* Some good samples of galena (sulphide of lead) have been obtained, while cinnabar (sulphide of mercury), graphite (or plumbago), zinc-blende, native sulphur, and other minerals are known to exist. In 1924 a deposit of lignite was discovered on Smoky Creek, a tributary of the Era River.

A mineral laboratory and museum have been fitted up, and are available to prospectors and others interested.

7. *Water Power.*—Most of the rivers in Papua carry a large volume of water from a great height over a relatively short distance, thereby offering opportunities for the installation of hydro-electric power plants. It is estimated that there is at least 10,000,000 h.p. available for this purpose.

### § 6. Trade and Shipping.

1. *Customs Tariff.*—In the Schedule to the Customs Tariff of Papua 136 items are mentioned, of which approximately one-third are on the free list, consisting of a number of foodstuffs and certain manufactures for use in the development of the Territory or its industries. Where duties are imposed they are generally on a 10 per cent. ad valorem basis, with the exception of ale, spirits, beverages and tobacco on which high revenue rates are imposed. Preference is given to Australian wines. On 16th July, 1931, a primage duty of 4 per cent. ad valorem was imposed on all goods whether dutiable or not in addition to the ordinary customs dues; the rate was subsequently reduced to 2½ per cent. and the duty ceased to operate on 1st July, 1937. From 12th July, 1940, the duty has been re-imposed, but certain specified articles have been exempted. The value of imports into Papua during 1940-41 was £539,152 and the duty collected, £63,116. The duty collected in 1939-40 was £64,611.

In 1940-41, £4,255 was received in export duties which are levied on pearl-shell, gold and copra, in the latter case only on the excess above £20 per ton of a certain declared value deemed to be the London market price.

Provision is made in the Australian Customs Tariff (Papua and New Guinea Preference) 1936 for the free entry into Australia of certain goods produced and imported direct from Papua (see Chapter XIV. "Trade"), and a proclamation of 25th September, 1935, exempted from primage duty goods the produce or manufacture of the Territory.

2. Imports and Exports.—Tables of imports and exports during the years 1936-37 to 1940-41 are given below. The values of exports are expressed in Australian currency but it is not possible to determine accurately the currency of the £ in the table of imports.

## PAPUA : IMPORTS AND EXPORTS.

Particulars.	1936-37.	1937-38.	1938-39.	1939-40.	1940-41.
IMPORTS.					
	£	£	£	£	£
Ale, spirits and beverages ..	11,362	14,453	14,818	19,544	24,922
Tobacco and manufactures ..	25,637	24,213	27,466	31,669	31,874
Agricultural products and groceries	114,621	143,937	138,551	156,560	160,345
Textiles, felts, furs, attire, etc. ..	40,987	45,492	37,712	55,388	46,883
Metals and machinery ..	98,875	124,277	76,068	306,937	80,294
Oils, paints and varnishes ..	27,519	37,139	33,331	44,141	37,437
Earthenware, cement, glass, etc.	5,078	6,969	5,585	7,069	7,939
Drugs and chemicals ..	9,596	12,904	12,828	17,630	16,904
Wood, wicker and cane ..	7,620	14,918	13,076	8,400	9,039
Jewellery and fancy goods ..	9,171	9,495	7,756	8,075	7,443
Leather and rubber ..	6,288	6,748	8,076	11,154	8,996
Paper and stationery ..	6,317	8,569	8,521	8,218	8,237
Miscellaneous ..	58,633	126,479	94,273	79,128	53,516
Government stores ..	30,352	55,904	36,747	72,499	45,323
Total ..	452,056	631,497	514,808	826,412	539,152
EXPORTS.					
	£	£	£	£	£
Bêche-de-mer ..	3,939	1,363	2,506	1,024	1,202
Coco-nut, desiccated ..	47,137	52,628	48,140	58,015	59,523
Coffee beans ..	7,536	6,606	6,911	5,289	5,754
Copra ..	191,808	91,166	57,999	45,568	59,062
Gold ..	91,775	109,738	152,103	139,621	133,341
Pearls ..	1,966	2,400	15	..	6,000
Rubber ..	124,174	129,448	114,949	152,487	172,099
Trochus-shell ..	12,581	8,578	9,200	9,312	1,680
Other ..	43,085	33,666	98,335	99,356	54,114
Total ..	524,001	435,593	490,158	510,672	492,775

The trade of the Territory reached its maximum in 1939-40, exceeding by £180,414 the previous highest figure which was established in 1925-26 when imports were valued at £470,774 and exports at £685,896. Prices for both copra and rubber were high about that time and the copper-mines were producing freely.

3. Direction of Trade.—Particulars of the countries of origin of the imports into Papua and the destination of the goods shipped therefrom are shown below for the last three years ended 1940-41.

**PAPUA : DIRECTION OF TRADE.**

Country.	Imports.			Exports.		
	1938-39.	1939-40.	1940-41.	1938-39.	1939-40.	1940-41.
	£	£	£	£	£	£
Australia .. ..	239,105	319,431	298,848	409,408	456,120	453,504
United Kingdom ..	56,699	88,354	51,732	25,840	12,454	16,764
Other British .. ..	45,313	28,505	49,454	17,630	8,359	8,453
Europe .. ..	23,966	14,864	5,414	11,024	11,118	..
Japan .. ..	14,858	18,937	24,821	7,582	4,237	7,718
Asia, excluding Japan	38,960	42,563	15,414	2,425	252	1,279
Dutch East Indies and Philippine Islands..	21,288	24,188	29,278	11,519	10,948	4,744
U.S. of America ..	73,446	288,224	64,137	576	5,077	313
America, Other ..	1,173	1,346	54	..	2,107	..
Morocco .. ..	..	..	..	4,154	..	..
Total " .. ..	514,808	826,412	539,152	490,158	510,672	492,775

4. Shipping.—The following table shows the number and tonnage of oversea vessels entered and cleared at ports during the past five years ended 1940-41. Of the vessels recorded in 1940-41, 166 were of British nationality.

**PAPUA : OVERSEA SHIPPING.**

Year.	Vessels.	Tonnage.
1936-37 .. ..	181	356,476
1937-38 .. ..	243	482,981
1938-39 .. ..	215	461,199
1939-40 .. ..	227	489,970
1940-41 .. ..	217	489,469

NOTE.—The above figures exclude ships of war and Government vessels.

**§ 7. Finance.**

The revenue and expenditure for the last five years were as follows :—

**PAPUA : REVENUE AND EXPENDITURE.**

Particulars.	1936-37.	1937-38.	1938-39.	1939-40.	1940-41.
	£	£	£	£	£
Revenue—					
Customs .. ..	57,443	58,539	54,606	64,874	77,358
Commonwealth Grant ..	42,500	42,500	42,500	42,500	42,500
Lands .. ..	6,531	6,708	6,013	7,112	7,700
Fees, fines, etc. ..	6,148	7,065	9,501	9,554	10,050
Other .. ..	(a) 59,169	67,996	53,203	53,878	51,910
Total .. ..	171,791	182,808	165,823	177,918	189,518
Expenditure—					
Medical .. ..	16,718	20,884	22,075	20,785	24,717
Ordinary Votes .. ..	(b) 127,926	122,536	116,277	127,456	132,633
Public Works .. ..	23,503	35,828	25,457	26,965	29,887
Native Affairs .. ..	2,773	3,854	2,522	2,726	1,763
Total .. ..	170,920	183,102	166,331	177,932	189,000

(a) Includes Commonwealth grant to rubber growers of £6,871.  
of Commonwealth special grant.

(b) Includes expenditure



### § 8. Progress of Papua.

As already stated in § 1, *supra*, the Territory was placed under Australian control on 1st September, 1906. The following table indicates the progress that has been made since that date :—

PAPUA : STATISTICAL SUMMARY.

Items	Year ended 30th June—			
	1907.	1939.	1940.	1941.
White population .. .. No.	690	1,608	1,822	3,070
Native labourers employed .. ..	2,000	19,733	20,352	20,065
Territorial revenue .. ..	£21,813	£123,323	£135,418	£147,018
" expenditure .. ..	£45,335	£166,331	£177,932	£189,000
Value of imports .. ..	£87,776	£514,808	£826,412	£539,152
" exports .. ..	£63,756	£490,158	£510,672	£492,775
Area of plantations .. .. acres	1,467	59,224	60,557	63,609
Meteorological stations established No.	3	21	21	21
Gold yield.. .. fine oz.	12,439	35,808	30,422	(a)10,348

(a) Nine months ended March, 1941.

### MANDATED TERRITORY OF NEW GUINEA.\*

#### § 1. General Description.

The land area of the Territory of New Guinea is about 93,000 square miles and the area including the sea within the lines drawn through its extreme outer points is more than 1,000,000 square miles. The coast of the Territory not having been completely surveyed, the areas of the various islands are known only approximately.

The approximate areas of the principal islands together with the small islands adjacent thereto are as follows :—

AREA OF TERRITORY OF NEW GUINEA.

Particulars.	Approximate Area.
North East New Guinea (also called "The Mainland") ..	Sq. Miles. 69,700
Bismarck Archipelago—	
New Britain .. ..	14,600
New Ireland .. ..	3,340
Lavongui .. ..	460
Admiralty Islands .. ..	800
Solomon Islands—	
Bougainville .. ..	3,880
Buka .. ..	220
Total .. ..	93,000

Information regarding physiography and climate will be found in Official Year Book, No. 22, p. 613, and in the *Official Handbook of the Territory*.

\* Civil Administration in the Territory of New Guinea was suspended at the close of 11th February, 1942, and military control commenced on 12th February, 1942. Matters relating to the former Civil Administration are dealt with by the Department of External Territories, Canberra. The Minister for External Territories has been empowered by National Security Regulations to exercise the powers and functions of the Administrator, officers and authorities of the Territory.

The Supreme Court of the Australian Capital Territory has been vested with the jurisdiction of the Supreme Court of the Territory of New Guinea.

## § 2. Government.

1. **The Military Occupation.**—On 17th September, 1914, the Acting Governor of German New Guinea signed terms of capitulation with the officer commanding a Naval and Military Expedition sent from Australia, and thereafter the Territory was under military administration until the establishment of Civil Government in May, 1921.

2. **Mandate.**—In 1919 it was decided by the Principal Allied and Associated Powers that the Territory of New Guinea, which Germany gave up as one of the terms of peace, should be entrusted under Mandate from the League of Nations to the Government of the Commonwealth. The issuing of the Mandate was, however, delayed, and it was not until 17th December, 1920, that its terms were settled; and the Mandate itself did not reach Australia until April, 1921.

The terms of the Mandate are given in Official Year Book No. 33 (see p. 264).

3. **New Guinea Act and Statute Law.**—In anticipation of the issuing of the Mandate the Commonwealth Parliament in September, 1920, passed the New Guinea Act 1920, by which the Governor-General was authorized to accept the Mandate when issued. The Territory was, by the Act, declared to be a Territory under the authority of the Commonwealth, with the name of the Territory of New Guinea.

The Act provided for an Administrator, while power to legislate for the Territory was to be exercised by the Governor-General, and provision was made for the observance of safeguards in the interests of the natives as set out in the Mandate.

In 1932 the Act was amended to provide for the establishment of a Legislative Council and an Executive Council for the Territory, the Executive Council to consist of nine members appointed by the Governor-General, of whom one shall not be an officer of the Territory. The Legislative Council is empowered to make Ordinances for the peace, order and good government of the Territory. Such Ordinances are subject to disallowance by the Governor-General who, however, is not now empowered to make Ordinances for the Territory. The amending Act was proclaimed to commence on 2nd May, 1933, and the Act is now entitled the New Guinea Act 1920-1935. The Acts of the Commonwealth Parliament do not (unless expressly so stated) extend to the Territory, but the Laws Repeal and Adopting Ordinance 1921-1939 provides that certain Acts and Ordinances shall be applied thereto.

4. **Legislative Council.**—The Legislative Council consists of the Administrator, the eight official members of the Executive Council and seven non-official members, the latter nominated by the Administrator and appointed by the Governor-General.

5. **Expropriation.**—The Treaty of Peace provided that German nationals resident in her former colonies might be repatriated, and that the property rights and interests of German nationals in former colonies might be retained and liquidated by the Allies, the proceeds being credited to Germany in part payment of the reparation payable by her under the Treaty. In pursuance of these powers, in September, 1920, the property of the principal German companies in the Territory, and in March, 1921, that of a large number of German planters, was vested in the Public Trustee. In 1926 and 1927 these plantations were transferred to private owners.

6. **Departments and Districts.**—The Administration is organized in eight Departments—Government Secretary; Treasury; District Services and Native Affairs; Public Health; Customs; Lands, Surveys, Mines and Forests; Agriculture; and Public Works.

For administrative purposes the Territory is divided into the seven following districts:—New Britain, comprising New Britain and adjacent islands; Morobe; Madang; Sepik (on the mainland); New Ireland, comprising New Ireland, Lavongai and adjacent islands; Manus, comprising the Admiralty Group; and Kieta, the former German portion of the Solomon Islands. Each district is under a District Officer, assisted by a small staff.

7. **Reports to the League of Nations.**—Nineteen reports have been rendered to the League of Nations in compliance with Article 6 of the Mandate, the latest being for the year ended 30th June, 1939.

### § 3. Population.

1. **White Population.**—The number of the white population at various intervals since 1885 is shown in the following table. At 30th June, 1941, the white population was 4,101, of whom 3,122 were British subjects.

#### TERRITORY OF NEW GUINEA : WHITE POPULATION.

Year.	Number.			Year.	Number.		
1885	..	..	64	1938	..	..	4,445
1933	..	..	3,191	1939	..	..	4,608
1936	..	..	4,281	1940	..	..	4,399
1937	..	..	4,286	1941	..	..	4,101

2. **Asiatic Population.**—Malays seem to have been the first Asiatics brought by the Germans to German New Guinea; 37 of them were recorded on the mainland in 1885. About 1889 the New Guinea Company began to bring Chinese, Malays and Javanese in growing numbers from Singapore and Java to work on the plantations; in the year 1892 there were about 1,800 Asiatics on the mainland. By 1898 the number had decreased to 300 or 400, but it had risen to 1,830 at the time of the 1933 Census and at 30th June, 1941, numbered 2,228, of whom 2,199 were Chinese and 29 Japanese. The Japanese at the 1933 Census numbered 73. The Chinese provide the skilled artisans of the Territory, and many of them are small traders. Most of the Japanese residents are employed on the plantations, or in shipyards and stores.

3. **Native Population.**—As a large portion of the Territory is not under Government influence it is not possible to obtain reliable figures in regard to the number of the natives.

The following table shows the number enumerated as at 30th June, 1941 :—

#### TERRITORY OF NEW GUINEA : NATIVE POPULATION AT 30th JUNE, 1941. (Including Indentured Labourers.)

District.	Children.			Adults.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
Kieta ..	11,307	9,912	21,219	15,618	15,218	30,836	26,925	25,130	52,055
Madang ..	37,406	30,897	68,303	58,786	54,901	113,687	96,192	85,798	181,990
Manus ..	3,259	2,749	6,008	4,235	3,891	8,126	7,494	6,640	14,134
Morobe ..	29,334	26,348	55,682	42,541	39,076	81,617	71,875	65,424	137,299
New Britain ..	21,737	19,349	41,086	34,563	25,938	60,501	56,300	45,287	101,587
New Ireland ..	7,619	6,422	14,041	15,791	11,723	27,514	23,410	18,145	41,555
Sepik ..	32,223	27,772	59,995	44,049	45,060	89,109	76,272	72,832	149,104
<b>Total</b> ..	<b>142,885</b>	<b>123,449</b>	<b>266,334</b>	<b>215,583</b>	<b>195,807</b>	<b>411,390</b>	<b>358,468</b>	<b>319,256</b>	<b>677,724</b>

(a) Includes 6,560 Mission scholars, constabulary, etc.

The number of natives indentured as labourers, mostly for plantation work, on 30th June, 1941, was 34,087, compared with 39,344 in the previous year.

### § 4. The Natives.

1. **General.**—The natives are divided into two main groups—Melanesian and Papuan—the former, with a few exceptions, constitute the population of the Bismarck Archipelago, the Solomon Islands, and of the coastal districts of the New Guinea mainland, while the latter inhabit the interior of the mainland. Odd tribes of Negritos exist in the mountains of New Guinea. There is a strain of Papuan, and, possibly, of Polynesian blood in the Admiralty Islanders, while the Western Islanders and the inhabitants of the small islands east and south-east of New Ireland are Micronesians. (See Official Year Book, No. 16, p. 670, and *Official Handbook of the Territory*, Pt. V.)

2. **Land Tenure.**—Native customs in regard to the ownership and use of land may be briefly outlined as follows. The ownership and use of the land are generally individual, although, in some rare cases, particularly in North Bougainville, the communal system



exists. In districts where a great many coco-nut palms are growing on native lands it is often found that the land is the property of a chief or of one of the old men of the tribe, and that the coco-nut palms growing thereon are divided into small groves, and are the property of several members of the tribe. Customs with regard to the use of unoccupied forest lands vary. Right of inheritance to land is almost invariably through the maternal branch. (See Official Year Book No. 17, p. 634, and *Official Handbook of the Territory*.)

3. **Research Work.**—During the German occupation of the Territory a certain amount of research work was carried out, partly by scientific expeditions, and partly by missionaries and by a local resident. For many years an anthropologist was engaged consolidating the work already done, and extending it throughout the Territory. The results of his work appear in special reports.

4. **Education.**—Provision is made for the education of natives in the Ordinance of 1922-1938 under which the Administrator is authorized to establish schools, grant money therefor, prescribe instruction, and arrange for the training of teachers and other matters. The expenditure on native education in 1940-41 was £6,827. Though the natives are liable to pay education tax, none has been collected since 1922-23. The European teachers have been seconded from the Education Department of Queensland. During the year ended 30th June, 1941, the following schools were maintained by the Administration:—Native elementary schools and native day schools, Malaguna, Tavui, Nodup and Pila Pila, near Rabaul, and Kavieng and native elementary school at Chimbu (Morobe); native technical school, Malaguna; native agricultural school, Keravat. In addition there are schools for Europeans at Rabaul, Kavieng and Wau. A new day school for European children was erected at Bulolo in the Morobe District during the year.

A considerable amount of educational work is carried out by the missions, the schools maintained being of three classes; (a) elementary schools in villages; (b) intermediate boarding schools at head-quarters; and (c) high schools and technical schools. At 30th June, 1941, the various missions maintained 31 training centres, 51 high and technical schools, 144 elementary schools, and 2,397 village schools. The pupils numbered 65,598 at 30th June, 1940.

The missions also conduct schools for Chinese children in Rabaul and Kavieng.

The granting of assistance to mission schools is provided for by the Education Ordinance, but no grants have hitherto been made.

5. **Health of Natives.**—In a report dealing with the health of the natives in New Britain submitted before the War of 1914-19, it was stated that "the natives in the districts examined are not degenerate; but they are sick". The same qualification undoubtedly applies to the native population throughout the Territory.

The diseases taking the greatest toll of native life directly or through lowering vitality are—Malaria, respiratory diseases, dysentery, frambœsia, yaws, tropical ulcer, hookworm, filariasis and beriberi.

The Health Department of the Administration consists of (i) a staff of medical officers and orderlies, including travelling doctors; (ii) native hospitals at Government stations and sub-stations (its staff also supervises hospitals on plantations); (iii) a laboratory; (iv) training system for natives as medical orderlies; (v) scheme of distribution of medical necessities; and (vi) two leper-stations. It also undertakes the general oversight of sanitary conditions. The first Infant Welfare Centre in the Territory was opened in Malabunga in August, 1931.

6. **Missions.**—Several mission societies are operating in the Territory. The Society of the Sacred Heart of Jesus works in the Bismarck Archipelago, the Society of the Holy Ghost and the Society of the Divine Word along the coast of North-East New Guinea from Sek to the Dutch border, the Marists in Buka and Bougainville. These are Roman Catholic Missions. The Protestant Missions are the Australian Methodist Mission in New Britain and New Ireland, the New Zealand Methodist Mission in Bougainville, the Liebenzell Mission in the Admiralty Group, the Lutheran Mission (supported and staffed by the Lutheran Churches in Australia and America), which

works along the coast of North-East New Guinea from Sek to the Papuan border, the Melanesian Mission (Anglican) in New Britain, and the Seventh Day Adventist Mission in Bougainville and New Britain. All these societies include teaching and planting with their missionary work.

### § 5. Land Policy.

1. **Acquisition of Land.**—A short account of the modes of acquiring land appears in Official Year Book No. 19, p. 590, but considerations of space preclude its repetition.

2. **Land Policy of the Present Administration.**—The Land Ordinance 1922-1941 provides for sale as well as leasing of land belonging to the Administration. The divergence from the policy usually adopted by the British in the Pacific (including Papua), which provides for leasehold only, was made with a view to disposal by sale of the freehold properties taken over from Germans, and which until 1927 were controlled by the Expropriation Board. The general land policy is based on the leasehold principle. All grants or leases contain a reservation to the Administration of all minerals, including mineral oil. Leases are for a term of 99 years except where a shorter period is provided. Lands, except in towns, are classified by a Land Board into land suitable for agriculture (Class A) and land not so suitable (Class B), and the unimproved value of the land is assessed. In the case of agricultural leases for more than 30 years the rent is 5 per cent. of the unimproved value, with power to remit during the first ten years, and subject to reappraisal every 20 years. Pastoral leases of lands of Class B may be granted for terms not exceeding 30 years, at a rental of  $2\frac{1}{2}$  per cent. of the unimproved value, subject to reappraisal every 10 years. Agricultural leases are subject to improvement conditions and pastoral leases to stocking conditions. Leases of town allotments may be granted for terms not exceeding 99 years, at a rent to be fixed at such percentage of the unimproved value as is prescribed.

The following table shows the leases in force on 30th June, 1941 :—

**TERRITORY OF NEW GUINEA : LEASES IN FORCE, 30th JUNE, 1941.**

Tenure.	No. of Leases.	Area.
		Acres.
Agricultural leases .. .. .	442	141,628
Pastoral leases .. .. .	3	9,496
Residence and business leases .. .. .	320	334
Special leases .. .. .	56	707
Mission leases .. .. .	441	1,542
Chinatown leases .. .. .	213	58
Long period leases from German régime ..	115	5,189

The area of the Territory is estimated at 59,517,593 acres, of which 906,763 acres had been purchased from the natives by the Administration to 30th June, 1941. This alienated land comprised 521,057 acres of freehold, 158,952 acres of leasehold, 200,144 acres held by the Administration, and 26,610 acres vested in the Director of District Services and Native Affairs as a trustee for natives. The area alienated in 1940-41 was 3,360 acres.

3. **Registration of Titles.**—Under German law there was a system of registration of titles in a "Ground Book," but registration did not confer an indefeasible title. The German system has been replaced by one modelled on the Torrens plan, embodied in an Ordinance entitled the Lands Registration Ordinance 1924-1939.

### § 6. Production.

1. **General.**—The natives have been described as a people of peasant proprietors, practising a crude form of agriculture. Their gardens and groves furnish but a small amount of produce for oversea trade, and the exports of the Territory grew only as European plantations were made, and natives were employed to work them.

In recent years scientific methods of cultivation have been adopted, and production has been greatly increased thereby. Bounties are paid by the Commonwealth Government on cocoa beans and shells, hemp and coir, sago, vanilla beans, bamboos and rattans, spices and kapok produced in the Territory and exported direct to Australia for home consumption.

2. *Agriculture.*—(i) *General.* Under the supervision of the Director of Agriculture soil analysis has been undertaken in different parts of the Territory and an agricultural chemist was appointed recently to carry out this specialized work. A demonstration plantation has been established at Keravat where natives are being trained in tropical agriculture. A laboratory and a herbarium have been established, an entomologist and economic botanist engaged, and travelling inspectors appointed for the purpose of combating plant pests. Experiments are being carried on with a variety of crops. The foregoing measures, in conjunction with the Papua and New Guinea Bounties Act 1937 and the preference given by the Commonwealth Tariff to certain produce grown in the Territories, have greatly stimulated tropical agriculture.

(a) *Coco-nuts.* Coco-nut growing was, prior to the outbreak of war in September, 1939, by far the most important industry in the Territory, but low prices followed by the collapse of the world copra market have checked expansion during recent years. Exports of copra declined in value from £504,627 in 1939-40 to £266,970 in 1940-41. The export of copra reached its peak in 1936-37 when 76,409 tons valued at £1,231,309 were shipped.

(b) *Tobacco.* Many planters are cultivating tobacco to cater for the local market. Two companies have manufactured tobacco suitable for issue to the natives or for trade. In some instances planters are issuing the dry leaf to the native labourers who make their own cigars and cigarettes.

(c) *Cotton.* In 1924-25 the Government obtained 1,615 lb. of cotton seed, and cultivation was tried at the experimental stations as well as by private planters, including a few natives, but little progress has been made.

(d) *Kapok.* The cultivation of kapok was continued on a small scale. The local demand is more than sufficient to absorb the available crop.

(e) *Cocoa.* Greater interest is being displayed in the cultivation of cocoa. The quality of the beans produced is good, and 292 tons were exported during 1940-41.

(f) *Desiccated Coco-nut.* Three desiccated coco-nut factories have been established in the Territory. The quantity exported during 1940-41 was 1,877 tons, an increase of 96 tons over the previous year's figure.

(g) *Coffee.* Two plantations of coffee are in satisfactory condition and are commencing to yield. Seventy-four tons of coffee valued at £5,525 were exported during 1940-41. The coffee is of good quality and is well received on the Australian market.

(h) *Rubber.* The tapping of rubber trees was increased during the year mainly because of the satisfactory price of rubber.

(i) *Other Crops.* The climate and soil of New Guinea are suitable for the cultivation of rice, Manilla hemp, cinchona, nutmeg, vanilla, peanuts and maize, but hitherto their cultivation has either not advanced beyond the experimental stage or has been attempted on a small scale only. Sugar-cane of many varieties flourishes, and the natives cultivate extensive areas for their own use; other indigenous food-producing plants include the sago palm and the cassava.

(j) *Plants Yielding Power Alcohol.* It seems probable that alcohol for power purposes will be produced economically. The sago palm and nipa palm yield as much as 60 gallons a ton, and in places are abundant.

(ii) *Plantations.* During 1934-35 the Administration disposed of the several plantations maintained by it with the exception of the demonstration plantation at Keravat. The principal crops grown on plantations are shown in the table hereunder for the year ended 30th June, 1940. The figures are not complete, but they give an indication of the progress of agriculture in the Territory.



## TERRITORY OF NEW GUINEA : PLANTATIONS, 1939-40.

(Excluding Native Reserves.)

Crop.			Area Planted.(a)	Area Bearing.	Yield.
			Acres.	Acres.	Tons.
Coco-nuts ..	..	..	261,676	210,954	(b)71,583
Cocoa ..	..	..	5,827	2,301	570
Coffee ..	..	..	2,792	1,935	56
Rubber ..	..	..	2,481	1,591	95
Kapok ..	..	..	556	321	15
Native Food (c) ..	..	..	3,289	1,453	2,099
Other ..	..	..	912	106	..
Total ..	..	..	277,533	218,661	..

(a) Includes inter-planted crops.

(b) Copra; Desiccated coco-nut, 696 tons, also produced.

(c) Native food of all kinds is mostly grown between young coco-nut palms not yet in bearing.

The area of plantations at various periods from 1885 to 1940 is shown hereunder. As in the case of the previous table, the figures exclude native plantations :—

## TERRITORY OF NEW GUINEA : PLANTATIONS.

Year ended June—			Total Area.	Area Planted.	Area under Coco-nuts (including Area not in Bearing).
			Acres.	Acres.	Acres.
1885 ..	..	..	148	(a)	(a)
1895 ..	..	..	2,152	(a)	(a)
1911 ..	..	..	58,837	(a)	51,510
1914 ..	..	..	84,488	(a)	76,847
1924 ..	..	..	411,275	(a)	172,373
1932 ..	..	..	460,942	216,730	211,882
1937 ..	..	..	487,375	244,066	234,189
1938 ..	..	..	496,118	262,547	239,976
1939 ..	..	..	504,000	264,877	253,235
1940 ..	..	..	525,965	277,533	261,676

(a) Not available.

3. **Live Stock.**—The coco-nut plantations are now of a sufficient area to maintain numerous live stock, the stock being depastured on the indigenous grasses growing between the rows of palms. In 1939-40 there were 1,323 horses, 20,494 cattle, 1,184 sheep, 9,327 goats, and 6,160 pigs (excluding the large number of pigs kept by the natives).

4. **Timber.**—An investigation of the timber resources has been made by the Commonwealth Inspector-General of Forests, and a report in connexion therewith was published in 1926. According to this report, while offering no prospects of immediate gain to large sawmilling interests, the Territory possesses forest potentialities of a high order. A recent survey of the timber resources of the Morobe District has indicated, however, that a pine forest in the Bulolo Valley contains approximately 200 million super. feet of millable timber; it is proposed to harvest this forest over a period of years and progressively to re-afforest the area. In North-East New Guinea the Lutheran Mission and the Holy Ghost Mission both possess up-to-date sawmilling plants, while most of the timber required in the Archipelago is supplied by the Sacred Heart Mission's sawmill and three privately owned mills in New Britain. Timber cut on permit areas during 1940-41 was 5,785,027 super. feet in the log. The exports, consisting principally of timber in the log, amounted to 6,272,904 super. feet in 1940-41.

The Forestry Ordinance 1936-1937 provides for the issue of permits and licences to cut timber. Timber growing on native lands cannot be acquired by private purchasers directly from the natives, but must be obtained through the Administration. A royalty is payable on all forest produce taken under a permit or licence. Eight timber permits were issued during 1940-41 and 26 permits were in force at 30th June, 1941, embracing an area of approximately 199,019 acres.

5. Fisheries.—The wealth of the waters of the Territory has been little exploited. Fish is caught at many places along the coast to supply the small local demand of the natives and of the few resident Europeans. Pearl-shell is exported in fair quantities, while bêche-de-mer, trochus-shell and tortoise-shell also figure amongst the exports. The value of marine products exported in 1940-41 was £9,255, compared with £11,956 in the previous year.

6. Mining.—Except for gold there has been little mining in New Guinea. Gold has been discovered on the Waria, the Ramu, the Francisco, and the Markham Rivers, and recently in tributaries of the Sepik River. Rich gold was discovered in the Morobe District in 1926; the field is situated about 60 miles (35 by air) inland from Salamaua, the nearest coastal port. Communication has been established with the coast by a regular aeroplane service. Osmiridium is reported to have been found on the upper tributaries of the Ramu, and platinum on the Kabenau River. Copper has been discovered in the form of chalcopyrite and malachite in the Baining District. Iron occurs as magnesite and hæmatite in the Baining District, apparently in large quantities. Sulphur occurs in several localities in the volcanic regions of the Territory. Brown coal has been found on the mainland in the vicinity of Astrolabe Bay, and in the southern portion of New Ireland.

Mining is regulated by the Mining Ordinance 1928-1940. Copies of the Ordinance and Regulations made thereunder may be obtained from the Secretary, Department of External Territories, Canberra.

The following table shows the production of gold during the past five years :—

TERRITORY OF NEW GUINEA : GOLD PRODUCTION.

Year.					Quantity.	Value.(a)
					Fine oz.	£
1936-37	..	..	..	..	223,120	1,938,694
1937-38	..	..	..	..	223,929	1,935,954
1938-39	..	..	..	..	237,705	2,153,018
1939-40	..	..	..	..	278,922	2,917,526
1940-41	..	..	..	..	263,097	2,808,835

(a) Valued at average price realized for fine gold in Australia.

Since the high market price of gold has been maintained, the search for profitable areas in various parts of the Territory has not diminished and systematic testing by drilling and other means has been undertaken on alluvial areas previously considered unworthy of attention. Although there were no new discoveries of alluvial or reef gold during the year, work proceeded steadily on the known gold-bearing areas.

A search for petroleum is being actively conducted on the mainland. The Petroleum Ordinance 1936 has been superseded by the Petroleum (Prospecting and Mining) Ordinance 1938-1939, which has facilitated the carrying out of geological surveys and prospecting activities generally. On 30th June, 1941, two permits to search for petroleum were in force.

## § 7. Trade.

1. Customs Tariff.—With the exception of high revenue rates on ale, spirits, beverages and tobacco and a duty of 3d. per gallon on petrol, kerosene and lubricating oil, the tariff of the Territory of New Guinea is generally on a 10 per cent. ad valorem basis. Only 72 items are mentioned in the import schedule, of which approximately

60 are on the free list consisting of articles for use by the Administrator, the Trade Commissioners and the Missions, medical supplies, live stock, meat, fish, fresh fruit, vegetables and certain essential manufactures for use in the Territory. The rate of duty for the remaining items as well as for all other goods not mentioned in the schedule is 10 per cent. ad valorem. No preferential tariff rates are provided in the schedule.

Export duties are levied on copra, trepang, shell, feathers and sulphur. When the price, or the assessed value of copra is less than £5 15s. per ton no tariff is imposed, but when the price exceeds this figure up to £11 per ton 2s. 6d. per ton is charged, which increases on a sliding scale to 11s. 6d. per ton as the price rises to £18, with an additional 2s. per ton for every further increase of £1 in the price of copra. The imports in 1940-41 amounted to £962,129 on which £147,452 was received in import duties, while £590 was paid in export duties and royalties.

Provision is made in the Australian Customs Tariff (Papua and New Guinea Preference) 1936 for the free entry into Australia of certain goods produced and imported direct from the Territory of New Guinea (see Chapter XIV. "Trade"), and a proclamation of 25th September, 1935, exempted from primage duty goods the produce or manufacture of the Territory.

2. Imports and Exports.—Values of the principal items of imports and exports for the years 1936-37 to 1940-41 are shown below. The values of exports are expressed in Australian currency, but it is not possible to determine accurately the currency of the £ in the table of imports.

#### TERRITORY OF NEW GUINEA : IMPORTS AND EXPORTS.

Particulars.	1936-37.	1937-38.	1938-39.	1939-40.	1940-41.
IMPORTS.					
	£	£	£	£	£
Foodstuffs of animal origin ..	142,943	157,391	152,023	165,637	127,464
Foodstuffs of vegetable origin ..	186,732	190,657	158,895	164,751	145,070
Spirituous and alcoholic liquors ..	50,550	52,385	54,969	50,161	46,753
Tobacco and preparations thereof	59,045	58,155	63,122	61,160	51,931
Live animals .. ..	1,870	1,843	1,328	664	508
Animal substances .. ..	1,227	961	1,124	1,587	179
Vegetable substances and fibres	3,539	4,191	3,307	3,640	2,386
Apparel, textiles and manufac- tured fibres .. ..	152,923	182,590	138,077	130,360	93,164
Oils, fats and waxes .. ..	56,982	72,080	65,901	97,370	72,153
Paints and varnishes .. ..	14,422	11,044	10,934	9,932	7,818
Stones and minerals .. ..	14,039	16,030	8,164	4,314	5,439
Metals, manufactures and mach- inery .. ..	431,216	635,991	470,781	387,125	252,750
Rubber and leather and manu- factures .. ..	13,810	15,663	16,365	21,668	16,739
Wood and wicker .. ..	28,860	33,565	29,195	20,617	9,105
Earthenware, cement, glass, etc.	17,113	14,251	13,215	13,549	8,383
Paper and stationery .. ..	22,917	24,026	22,829	24,169	19,122
Jewellery and fancy goods ..	11,282	21,328	14,133	10,231	10,045
Optical and scientific instruments	18,610	21,377	22,318	14,750	17,140
Drugs, chemicals and fertilizers ..	44,907	46,878	46,163	45,101	45,539
Miscellaneous .. ..	38,636	50,561	47,992	41,311	30,441
Specie .. ..	80,400	31,500	..	..	..
Total .. ..	1,392,023	1,642,467	1,340,835	1,268,097	962,129



TERRITORY OF NEW GUINEA: IMPORTS AND EXPORTS—*continued.*

Particulars.	1936-37.	1937-38.	1938-39.	1939-40.	1940-41.
EXPORTS.					
	£	£	£	£	£
Copra .. .. .	1,231,309	847,734	727,949	504,627	266,970
Cocoa .. .. .	6,600	4,475	6,580	11,340	11,680
Ivory nuts .. .. .	767	162	..	7	..
Trepang .. .. .	1,350	2,250	2,025	1,680	1,870
Shell (trochus, etc.) .. .. .	26,960	12,478	10,560	10,227	7,383
Tortoise-shell .. .. .	50	91	89	49	2
Gold .. .. .	2,020,667	2,028,980	2,129,263	3,021,731	2,797,226
Desiccated coco-nut .. .. .	86,930	73,423	69,960	89,050	93,850
Rubber .. .. .	..	242	4,050	13,328	19,027
Miscellaneous .. .. .	45,073	25,334	23,419	29,081	55,976
Total .. .. .	3,419,706	2,995,169	2,973,895	3,681,120	3,253,984

3. Direction of Trade.—Particulars of the countries of origin of the imports into the Territory of New Guinea and the destination of the goods shipped therefrom during the years 1938-39 to 1940-41, are given in the following table.

## TERRITORY OF NEW GUINEA : DIRECTION OF TRADE.

Country.	Imports.			Exports.		
	1938-39.	1939-40.	1940-41.	1938-39.	1939-40.	1940-41.
	£	£	£	£	£	£
Australia .. .. .	563,594	583,291	489,369	2,326,269	3,283,246	3,039,767
United Kingdom .. .. .	154,501	119,042	79,136	337,605	220,200	47,599
Other British .. .. .	48,163	55,306	63,745	..	..	29,976
China .. .. .	69,831	87,412	43,317	17,428	11,115	1,870
Japan .. .. .	46,627	34,921	28,063	7,445	7,266	28,822
France .. .. .	3,806	2,523	1,275	6,193	12,291	..
Germany .. .. .	71,245	17,430	4,595	31,829	2,669	..
U.S.A. .. .. .	265,591	247,189	167,437	..	62,529	21,131
Other .. .. .	117,477	120,983	85,192	247,126	81,804	84,819
Total .. .. .	1,340,835	1,268,097	962,129	2,973,895	3,681,120	3,253,984

The bulk of the imports into the Territory of foodstuffs, beer, coal, paints, boats, launches and soap comes from Australia, which also supplies large quantities of machinery and metal manufactures, drugs, explosives, tobacco, cigarettes, apparel, boots, leather manufactures, timber, stationery and polishes.

## § 8. Shipping and Communication.

1. **General.**—A subsidized mail service between New Guinea and Australia is maintained by Burns, Philp and Coy. Ltd., which company also operates a two-monthly non-subsidized service between Australia, New Guinea, Hong Kong and Saigon. The Dutch Royal Packet Navigation Company's vessel calls at Rabaul every five weeks en route from Singapore to Australia. Shipping within the Territory is regulated by the Shipping Ordinances 1936 and the Coastal Shipping, Ports, and Harbours Regulations.

2. **Oversea Tonnage in 1940-41.**—The number and net tonnage of oversea vessels which entered and cleared the Territory during 1940-41 are shown hereunder.

### TERRITORY OF NEW GUINEA : SHIPPING, 1940-41.

Nationality.	Vessels Entered.		Vessels Cleared.		Total.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
American .. ..	4	6,132	4	6,132	8	12,264
British .. ..	67	171,669	68	174,684	135	346,353
Dutch .. ..	5	12,090	5	12,090	10	24,180
Greek .. ..	1	3,209	1	3,209	2	6,418
Japanese .. ..	14	15,452	14	15,452	28	30,904
Norwegian .. ..	1	1,482	1	1,482	2	2,964
Panamanian .. ..	1	1,321	1	1,321	2	2,642
Thai .. ..	1	1,995	1	1,995	2	3,990
Total .. ..	94	213,350	95	216,365	189	429,715

3. **Local Shipping.**—Inter-island shipping services were maintained by the steamers and motor vessels of Burns, Philp and Coy. Ltd., and W. R. Carpenter and Coy. Ltd. A number of smaller motor vessels were also engaged in this trade.

4. **Land Communication.**—Means of communication on land are scanty. There are no railways. Roads lead from Rabaul to places within 30 or 40 miles, and there is a road 200 miles long in New Ireland. Elsewhere there are few roads outside plantations and the District Officers' stations. The large rivers of the mainland are as yet but little used.

There is a high-power wireless station at Rabaul, and low-power installations at the out-stations, including Salamaua and Wau.

5. **Communication by Air.**—The discovery of gold in New Guinea has resulted in great aviation activity in the vicinity of the gold-fields. On account of the mountainous country and dense undergrowth between the coast and the gold-fields the task of transporting food and stores to the fields and of bringing the gold to the seaboard by land is an irksome and costly process. The fields are situated about 60 miles (35 by air) inland from Salamaua, and whereas aircraft cover the distance in approximately an hour, the nature of the country is such that a journey by other means occupies more than a week. During 1931-32 an air service was established between Port Moresby and the gold-fields, reducing the time occupied by the journey from Australia by about seven days. At 30th June, 1941, 41 aeroplanes were operating in New Guinea.

A weekly subsidized air service between Sydney and Rabaul came into operation on 30th May, 1938. Passengers and mails are carried and the route followed is Sydney, Brisbane, Rockhampton, Townsville, Cairns, Cooktown, Port Moresby, Salamaua and Rabaul.

Further reference to New Guinea air activities is contained in Chapter V. "Transport and Communication" (see p. 134).

## § 9. Revenue and Expenditure.

Details of the revenue collected from various sources and the expenditure during each of the last five years are given hereunder :—

## TERRITORY OF NEW GUINEA : REVENUE.

Particulars.	1936-37.	1937-38.	1938-39.	1939-40.	1940-41.
	£	£	£	£	£
<b>Taxation—</b>					
Customs(a) .. ..	233,657	247,062	214,629	207,261	158,222
Licences .. ..	12,654	13,087	13,796	12,667	10,408
Native Head Tax .. ..	21,859	20,481	21,417	20,025	21,786
Stamp duties .. ..	6,861	6,182	6,467	5,978	3,905
Postal .. ..	25,208	47,240	27,163	20,340	15,583
Lands .. ..	17,006	16,179	18,416	15,281	16,357
<b>Mining—</b>					
Royalty on gold .. ..	97,622	97,464	107,975	143,906	119,792
Other .. ..	24,154	19,479	16,403	40,297	50,995
Fees and fines " .. ..	24,377	19,285	17,947	16,155	13,615
Sales of stores, etc. .. ..	2,605	2,472	2,170	2,428	2,011
Miscellaneous .. ..	15,067	17,467	14,453	12,351	11,076
<b>Total .. ..</b>	<b>481,070</b>	<b>506,398</b>	<b>460,836</b>	<b>496,689</b>	<b>423,750</b>

## EXPENDITURE.

	£	£	£	£	£
<b>Treasury and Audit .. ..</b>	<b>66,177</b>	<b>52,570</b>	<b>54,736</b>	<b>60,628</b>	<b>45,530</b>
<b>Agriculture .. ..</b>	<b>15,851</b>	<b>17,722</b>	<b>19,424</b>	<b>20,337</b>	<b>19,475</b>
<b>Public Justice .. ..</b>	<b>31,209</b>	<b>32,809</b>	<b>34,245</b>	<b>34,530</b>	<b>31,606</b>
<b>Public Health .. ..</b>	<b>73,191</b>	<b>80,377</b>	<b>89,784</b>	<b>85,207</b>	<b>80,162</b>
<b>Public Works .. ..</b>	<b>29,228</b>	<b>30,954</b>	<b>34,802</b>	<b>28,097</b>	<b>22,730</b>
<b>District Services and Native Affairs</b>	<b>109,705</b>	<b>115,648</b>	<b>125,877</b>	<b>127,296</b>	<b>106,107</b>
<b>New Works .. ..</b>	<b>66,223</b>	<b>70,011</b>	<b>69,145</b>	<b>63,257</b>	<b>48,509</b>
<b>Native Welfare .. ..</b>	<b>6,177</b>	<b>7,185</b>	<b>6,453</b>	<b>6,621</b>	<b>6,078</b>
<b>Other .. ..</b>	<b>62,357</b>	<b>610,137</b>	<b>68,114</b>	<b>74,641</b>	<b>71,595</b>
<b>Total .. ..</b>	<b>460,118</b>	<b>508,613</b>	<b>502,580</b>	<b>500,614</b>	<b>431,792</b>

(a) Includes harbour dues, wharfage and storage fees.  
to the volcanic eruption.

(b) Includes £40,011. expenditure due

## NAURU (Mandated).\*

1. **General.**—Nauru is an oval-shaped atoll about 12 miles in circumference, having an area of about 5,263 acres, of which approximately two-thirds is phosphate-bearing. It is situated in longitude 166° E., and is 26 miles south of the Equator. Portion of the island between the sandy beach and the coral cliffs is fertile, and it is there that the Nauruans reside. With the exception of a small fringe around an inland lagoon, the plateau which contains the phosphate deposits possesses few food plants and is uninhabited, but portion of the area has been planted with fruit trees. The system of land tenure is governed by an old custom, and, with the exception of small allotments held by the Government, the British Phosphate Commissioners and the Missions, the whole of the island is owned by individual natives. The average shade temperature ranges

\* At present in enemy hands. Communications with Nauru ceased on 25th August, 1942, and it is assumed that the Island was occupied by Japanese Forces on or about that date.



between 72° and 95° F., and the average humidity between 70 and 80. The average rainfall is 85 inches, but droughts occasionally occur, and in 1916 and 1917 only 40 inches were received for the two years. Similarly in 1938 only 20.94 inches were recorded.

2. **History.**—The island, discovered by Captain Fearn in 1798, was annexed by Germany in 1888, and prior to 1914 was part of the protectorate of German New Guinea.

In November, 1914, Nauru was occupied by a detachment from the Australian Naval and Military Expedition at Rabaul, and it was included in the cession of colonies made by Germany in 1919 to the Allied and Associated Powers, whose representatives agreed that a mandate for its administration should be conferred upon His Britannic Majesty. The mandate, which is in similar terms to that for the Territory of New Guinea, was confirmed by the Council of the League of Nations on the 17th December, 1920. On 2nd July, 1919, the British, Australian and New Zealand Governments agreed that the administration (which, since 1915, had been in charge of an official appointed by the British Colonial Office) should be vested in an Administrator who took up duty in June, 1921. The first Administrator was appointed for a term of five years by the Australian Government; on the expiration of his service, it was extended for another five years, and he resigned in 1927. The second Administrator was appointed in June, 1927. The third Administrator was appointed in January, 1933, and the fourth in October, 1938. The Agreement between the three Governments was approved by the Commonwealth Parliament in the Nauru Island Agreement Act 1919, and is shown in the Schedule to that Act. A supplementary agreement concerning Nauru was drafted in May, 1923, and ratified by the Commonwealth Parliament by the Nauru Island Agreement Act 1932.

3. **Administration.**—The administration of the island is vested in the Administrator, who is obliged to conform to instructions issued by the Government which appointed him, and all ordinances made by him are subject to confirmation or disallowance by the Governor-General of Australia acting on the advice of the Federal Executive Council. All administration expenses are met from local revenue. Native industries such as canoe-building, fishing, mat-making, etc., are encouraged by the provision of prizes at annual competitions. An agency of the Commonwealth Savings Bank has been established. There is a co-operative store managed to a large extent by the natives. The store books, however, are audited by Government officers. Natives are not allowed to carry or be in possession of firearms, and the use by them of intoxicating liquors and deleterious drugs is prohibited.

4. **Population.**—The population figures on 1st April in each of the years from 1937 to 1939 and on 31st December, 1940 and 1941, are given hereunder :—

#### NAURU : POPULATION.

Nationality.	1937.	1938.	1939.	1940.	1941.
Europeans .. ..	194	179	171	192	68
Chinese .. ..	1,261	1,533	1,512	1,350	584
Nauruans (a) .. ..	1,658	1,727	1,765	1,761	1,827
Other Pacific Islanders ..	4	27	44	49	193
<b>Total ..</b>	<b>3,117</b>	<b>3,466</b>	<b>3,492</b>	<b>3,352</b>	<b>2,672</b>

(a) The natives of Nauru are Micronesians.

Births in 1941 numbered 83, all of which were Nauruans. There were 13 marriages (Nauruans), and 31 deaths (26 Nauruans and 5 Chinese).

5. **Health.**—Cases of the usual diseases known in the Pacific occur. Venereal disease is rare, but elephantiasis is occasionally met with. An area has been set apart for the segregation of lepers, and the latest methods of treatment are

applied. The total number of persons receiving treatment at 31st December, 1940, was 136, of whom 44 were in the Leper Segregation Hospital. Two hospitals are maintained on the island, one by the Administration for Nauruans, and one by the British Phosphate Commission for its employees. In common with other natives, the Nauruans are very susceptible to tuberculosis and influenza, and in 1921 an influenza epidemic caused the deaths of 230 islanders. Dysentery, both amœbic and bacillary, is endemic. A regular anti-mosquito campaign is conducted. Steps have been taken by the authorities to improve the water supply and to provide efficient sanitation generally. Every Nauruan is required to undergo a medical examination once a month. Baby clinics have been established to give help and advice to Nauruan mothers in regard to infant nurture.

6. Education.—Formerly the education of Nauruan and other native children was undertaken by the Missions subsidized by the Administration, but on 1st October, 1923, the Administration assumed responsibility for education. At the close of 1940 there were seven primary and two post-primary schools for natives and a primary school for European children. A total of 37 European children and 609 native children were receiving instruction. The school for European children is in charge of a teacher on loan from the Education Department of Victoria who also supervises educational matters generally. The curriculum is similar to that of corresponding schools in Australia, and the teaching is, as far as possible, wholly in English. Education is compulsory between the ages of six and sixteen for Nauruan and other native children; after the termination of ordinary school attendance, twelve months are devoted to technical training.

7. Judiciary.—The judicial power is vested in the Administrator in a Central Court and a District Court. The right of appeal is provided.

8. Religion.—The London Missionary Society (Protestant) and the Sacred Heart of Jesus Mission (Roman Catholic) operate in Nauru.

9. Phosphate Deposits.—(i) *General*. From 1906 to 1919 the deposits were worked by the Pacific Phosphate Company, which also worked the deposits on Ocean Island (about 165 miles east of Nauru and part of the Gilbert and Ellice Islands Colony administered by the Colonial Office). The quantity on Nauru has been estimated at not less than 50,000,000 tons, and the exports average 85 per cent. to 88 per cent. of tricalcium phosphate.

The interests of the Pacific Phosphate Company in the two islands (though not in other islands in the Pacific in which it had workings) were bought by the British, Australian and New Zealand Governments in 1919 for £3,500,000 the purchase money being contributed in the proportions of 42, 42, and 16 per cent. respectively. The Agreement of 2nd July, 1919, provides for the working of the deposits by the British Phosphate Commission of three members, one appointed by each Government; and the three countries are to receive the output in the same proportions of 42, 42, and 16 per cent.

(ii) *Royalty on Phosphate*. By an agreement entered into between the British Phosphate Commissioners and the Nauruan landowners in 1927 provision was made, *inter alia*, for the payment of a royalty of 7½d. per ton of phosphate exported as follows:—

- (a) 4d. per ton to be paid to the Nauruan landowner concerned;
- (b) 1½d. per ton to the Administrator for the benefit of the Nauruan people;
- (c) 2d. per ton to the Administrator to be held in trust for the Nauruan landowner concerned and invested at compound interest for a period of 20 years. The capital will then remain invested and the interest thereon will be paid to the landowner.

The rates specified above were to have effect for a period not exceeding 20 years on and from 1st July, 1927, but the royalty of 4d. per ton to the Nauruan landowner was subject to adjustment for the second, third and fourth five-yearly period by increasing or decreasing it pro rata to any increase or decrease of the export price of the phosphate. The royalty for the second five-yearly period was increased to 4¾d. per ton.

In June, 1937, the price of phosphate had fallen to 14s. per ton and consequently under the terms of the original Agreement the royalty would have been reduced to 1½d. per ton. By an amendment of the Lands Ordinance in 1939 the agreement was extended for a period of 20 years, or to 30th June, 1967. The royalty of 2d. per ton paid to the Administrator to be held in trust and invested was increased from 1st July, 1937, to 2½d. per ton. From the same date a royalty of 4d. per ton was paid to the Nauruan landholders instead of 1½d. per ton under the original Agreement. This rate is subject to adjustment at the end of five years, and from 1st July, 1947, is to be 5d. per ton if the price of phosphate is 12s. per ton or less, with an additional ½d. per ton for each 1s. above 12s. up to a maximum royalty of 6d. per ton.

The amending Ordinance also increased, from 1st July, 1947, the lump sum to £45 per acre and to £7 10s. for areas less than 1 acre, payable to landowners from whom phosphate-bearing lands are leased.

(iii) *Nauru and Ocean Island Phosphate Industry.*—The following table gives particulars regarding exports of phosphate during the years 1937–38 to 1941–42 :—

#### NAURU AND OCEAN ISLAND : EXPORTS OF PHOSPHATE.

Year.			Total.	To Australia.	To New Zealand.
			Tons.	Per cent.	Per cent.
1937–38	..	..	1,169,361	66.17	24.81
1938–39	..	..	1,228,590	67.06	23.63
1939–40	..	..	1,243,428	54.49	32.14
1940–41	..	..	626,149	50.14	38.76
1941–42	..	..	144,454	53.79	46.21

From Nauru alone during the calendar year 1941 the export was 99,150 tons.

(iv) *Accounts of Commission.* A statement for the five years ended June, 1942, is given hereunder :—

#### NAURU AND OCEAN ISLAND : SALES OF PHOSPHATE.

Heading.	1937–38.	1938–39.	1939–40.	1940–41.	1941–42.
	£	£	£	£	£
Receipts from Sales, etc. ..	944,068	909,027	1,041,418	749,354	387,464
F.o.b. cost, including interest on capital, sinking fund, etc.	940,059	906,133	1,037,208	745,233	327,607

The amount due by the British Phosphate Commission to the partner Governments for purchase-money and other capital sums was £3,666,457 on 30th June, 1921, and at 30th June, 1942 this had been reduced to £3,024,373. The f.o.b. cost in 1941–42 includes a sum of £112,027 consisting of interest at 6 per cent. upon the purchase-price and a contribution to a sinking fund for the redemption of the capital debt in 50 years. The redemption fund now totals £507,127.

(v) *Employees.* Apart from a limited number of Europeans and a few Pacific Islanders, the employees are Chinese engaged under a three years' contract. A few Nauruans are employed occasionally.

10. *Trade.*—The Customs Tariff of Nauru provides for the free admission of all goods other than cigars, cigarettes, tobacco, spirits, wines, beer, cider, and perry, and cylinder blocks for motor cycle engines. Articles imported by the Administration for its own use and spirits for scientific purposes are exempt.

The Tariff rates apply to all countries alike. Information regarding imports and exports for the years 1937 to 1941 is shown in the following table.



## NAURU : IMPORTS AND EXPORTS.

Heading.			Year ended 31st December—				
			1937.	1938.	1939.	1940.	1941.
Imports ..	£		144,454	272,256	170,624	192,749	106,978
Exports—							
Phosphate ..	tons		688,900	841,050	932,100	808,400	99,150
	£		513,989	546,683	605,974	541,168	69,375

Of the total imports Australia supplied £72,348 or 68 per cent. during 1941; the balance came mainly from United Kingdom, China, Dutch East Indies, New Zealand and Canada in that order.

Phosphates were exported to Australia, 56,850 tons, and to New Zealand 42,300 tons.

II. Revenue and Expenditure.—The revenue and expenditure of the Administration during the years 1937 to 1941 were as follows :—

## NAURU : REVENUE AND EXPENDITURE.

Heading.			Year ended 31st December—				
			1937.	1938.	1939.	1940.	1941.
			£	£	£	£	£
Revenue ..	..		53,343	29,428	33,084	27,104	12,023
Expenditure ..	..		29,311	30,287	29,391	26,223	23,951

Of the revenue in 1941, royalty on phosphate amounted to £5,630, Post Office receipts £600, capitation tax £1,611, import duty £1,258, interest on investments £1,334, and harbour dues £78. At the close of 1941 the accumulated funds of the Administration amounted to £46,297.

Population estimates for States shown in this Chapter for the years 1939 to 1942, have been revised in the light of the Civilian Registration of June, 1943. For revised figures see Appendix. Australian totals herein do not require revision.

## CHAPTER XII.

### POPULATION.

#### § 1. Enumerations and Estimates.

The nature of the early "musters" of the population and the subsequent Census enumerations which have been conducted in Australia were reviewed in Official Year Book, No. 15, pp. 1083-5. This review was accompanied by a tabular statement showing the dates on which the various enumerations were made, and the number counted on each occasion.

#### § 2. Accuracy of Estimates of Population.

The results obtained at the Census attain a very high degree of accuracy and may generally be accepted without reservation.

Since the establishment of the Commonwealth Bureau of Census and Statistics attention has been given to the improvement of intercensal estimates. There was little doubt that the principal source of error was in the records of migration, and efforts were directed particularly to the improvement of these records with very gratifying results. The Census of 1911 disclosed an error in the pre-censal estimates of an amount equal to a percentage on the recorded overseas departures from Australia of  $14\frac{1}{2}$  per cent. for males and 10 per cent. for females. These percentages were used as adjusting factors for recorded overseas departures during the intercensal period 1911 to 1921. After the Census of 1921 these adjusting factors were reduced to 1 per cent. for males and  $4\frac{1}{2}$  per cent. for females, and from the results of the Census of 30th June, 1933, it would appear that the accuracy of the records of overseas migration is such that in future no adjustment of the recorded figures for Australia as a whole will be necessary.

It is improbable that the same degree of accuracy as has been attained in the record of external migration can be reached in the case of interstate movements. Records are made of interstate movements by sea, by rail, and by air, but it is impracticable to record the movements by road.

#### § 3. Census Statistics.

1. **Census of 1933.**—The first occasion on which the Census of the several Australian Colonies was taken on the same date was in the year 1881. Under the provisions of the Commonwealth Census and Statistics Act, which provides for the enumeration being dealt with from one centre instead of by each State as formerly, the first Census for the Commonwealth of Australia was taken by the Commonwealth Statistician in 1911, and the second in 1921. In accordance with the provisions of the Census and Statistics Act 1905-1930 the third Commonwealth Census would have been taken in 1931, but owing to the necessity for economy in governmental expenditure it was decided to defer that Census, and the date was subsequently fixed for 30th June, 1933, the Census

for the whole of Australia being taken as for the night between 29th and 30th June, 1933. The numbers recorded in the several States and Territories on 4th April, 1921, and 30th June, 1933, were as follows:—

POPULATION OF STATES IN CENSUS YEARS, 1921 AND 1933.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

State or Territory.	4th April, 1921.			30th June, 1933.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
New South Wales ..	1,071,501	1,028,870	2,100,371	1,318,471	1,282,376	2,600,847
Victoria ..	754,724	776,556	1,531,280	903,244	917,017	1,820,261
Queensland ..	398,969	357,003	755,972	497,217	450,317	947,534
South Australia ..	248,267	246,893	495,160	290,962	289,987	580,949
Western Australia ..	177,278	155,454	332,732	233,937	204,915	438,852
Tasmania ..	107,743	106,037	213,780	115,097	112,502	227,599
Northern Territory ..	2,821	1,046	3,867	3,378	1,472	4,850
Australian Capital Territory ..	1,567	1,005	2,572	4,805	4,142	8,947
Australia ..	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839

2. Increase since Census of 1881.—(i) *Australia.* The increase of population between the Census of 4th April, 1921, and that of 30th June, 1933, was 1,194,105, of which 604,241 were males and 589,864 were females, as compared with an increase of 980,729, comprising 449,835 males and 530,894 females, for the preceding ten years. The population enumerated at each Census from 1881 to 1933 was as follows:—

POPULATION OF AUSTRALIA AT EACH CENSUS, 1881 to 1933.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Date.	Males.	Females.	Persons.	Masculinity. (a)
3rd April, 1881 ..	1,214,913	1,035,281	2,250,194	117.35
5th April, 1891 ..	1,704,039	1,470,353	3,174,392	115.89
31st March, 1901 ..	1,977,928	1,795,873	3,773,801	110.14
3rd April, 1911 ..	2,313,035	2,141,970	4,455,005	107.99
4th April, 1921 ..	2,762,870	2,672,864	5,435,734	103.36
31st March, 1931 (b)	3,316,423	3,197,704	6,514,127	103.71
30th June, 1933 ..	3,367,111	3,262,728	6,629,839	103.20

(a) Number of males to each 100 females.  
Census of 30th June, 1933.

(b) These details have been estimated from the

(ii) *States and Territories.* The postponement till 1933 of the Census which ordinarily would have been taken in 1931 destroyed the continuity of the decennial intercensal period which had obtained in Australia since 1881, and consequently the increase shown in the following table for the period 1921–33 (12½ years) is not directly comparable with the results shown for the earlier periods. The corresponding increases for the ten-year



period (1921-1931) have been estimated from the latest Census data, and have been inserted in the table. The increases in the population of the several States and Territories during the last five intercensal periods have been as follows :—

## POPULATION : INTERCENSAL INCREASES.

State or Territory.	1881-1891.	1891-1901.	1901-1911.	1911-1921.	1921-1931 (estimated)	1921-1933 (12½ years)
New South Wales .. { Number Per cent.	374,129 49.90	230,892 20.54	293,602 21.67	453,637 27.55	450,930 21.47	500,476 23.83
Victoria .. { Number Per cent.	278,274 32.30	61,230 5.37	114,481 9.53	215,729 16.40	266,178 17.38	288,981 18.87
Queensland .. { Number Per cent.	180,193 84.39	104,411 26.52	107,684 21.62	150,159 24.79	164,388 21.75	191,562 25.34
South Australia .. { Number Per cent.	39,119 14.15	42,813 13.57	50,212 14.01	86,602 21.20	80,024 16.16	85,789 17.33
Western Australia.. { Number Per cent.	20,074 67.57	134,342 269.86	97,990 53.22	50,618 17.94	98,679 29.66	106,120 31.89
Tasmania .. { Number Per cent.	30,962 26.76	25,808 17.60	18,736 10.86	22,569 11.80	10,674 4.99	13,819 6.46
Northern Territory { Number Per cent.	1,447 41.93	(a) — 87 (a) — 1.78	(a) — 1,501 (a) — 31.20	557 16.83	1,104 26.55	983 25.42
Australian Capital Territory .. { Number Per cent.	(b) (b)	(b) (b)	(b) (b)	858 50.06	6,416 249.46	6,375 247.86
Australia .. { Number Per cent.	924,198 41.07	599,409 18.88	681,204 18.05	980,729 22.01	1,078,393 19.84	1,194,103 21.97

(a) Decrease.

(b) Included in New South Wales.

For Australia as a whole the numerical increase during the period 1921-1931 was greater by 97,664 than that for the period 1911-1921, but the percentage increase declined from 22.01 for 1911-1921 to 19.84 for 1921-1931. During the earlier period the increase corresponds to 2.01 per cent. per annum, and in the latter to 1.83 per cent. per annum.

## § 4. Distribution and Fluctuation of Population.

1. Present Numbers.—The population of Australia on 31st December, 1942, was estimated at 7,196,622 persons, of whom 3,621,058, or 50.32 per cent., were males and 3,575,564, or 49.68 per cent., were females. The increase during the year 1942, excluding deaths of defence personnel, was 67,683, equal to 0.94 per cent., males having increased by 31,876, or 0.88 per cent., and females by 35,807, or 1.00 per cent. This increase was largely due to the excess of births over deaths, namely, 61,517, the net gain by migration being only 6,166 persons. Recorded deaths of defence personnel from the outbreak of war to 31st December, 1942, numbered 8,283, of whom 8,265 were males and 18 females. Deficiencies in the original data render it impossible to allocate them correctly to the years to which they refer and in the estimates which follow they have been regarded as occurring during the year 1942. The net increase in the population for 1942 has therefore been taken as 59,400—23,611 males and 35,789 females.

2. Growth and Distribution.—In issues of the Official Year Book up to No. 15, the male and female populations of Australia as a whole are given at quinquennial periods from 1788, but it is considered that the abridged table presented herewith will suffice for general purposes.

## ESTIMATED POPULATION, 1800 to 1942.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

As at 31st Dec.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
MALES.									
(a) 1800	3,780	..	..	..	..	..	..	..	3,780
1810	6,611	..	..	..	..	974	..	..	7,585
1820	19,626	..	..	..	..	4,158	..	..	23,784
1830	33,900	..	..	..	877	18,108	..	..	52,885
1840	85,560	..	..	8,272	1,434	32,040	..	..	127,306
1850	154,976	..	..	35,902	3,576	44,229	..	..	238,683
1860	197,851	(b) 330,302	(b) 16,817	64,340	9,597	49,653	..	..	668,560
1870	272,121	397,230	69,221	94,894	15,511	53,517	..	..	902,494
1880	404,952	450,558	124,013	147,438	16,985	60,568	..	..	1,204,514
1890	602,704	595,519	223,252	166,049	28,854	76,453	..	..	1,602,831
1900	716,047	601,773	274,684	180,349	110,088	89,703	(c) 4,288	..	1,976,992
1910	858,181	646,482	325,513	206,557	157,971	98,866	2,738	..	2,296,308
1920	1,067,945	753,803	396,555	245,300	176,895	107,259	2,911	(b) 1,062	2,751,730
1930	1,294,419	892,422	481,559	288,618	232,868	113,505	3,599	4,732	3,311,722
1932	1,315,003	900,663	492,516	290,254	233,049	116,067	3,353	4,560	3,355,465
1933	1,324,839	905,050	497,468	291,722	234,442	116,891	3,370	4,997	3,378,779
1934	1,335,123	910,373	502,505	292,519	235,239	116,952	3,440	4,928	3,401,079
1935	1,344,339	911,710	508,381	293,650	237,229	117,978	3,482	5,005	3,421,774
1936	1,355,493	915,304	514,174	294,807	238,704	118,833	3,596	5,287	3,446,198
1937	1,368,505	918,665	519,689	295,611	241,297	120,869	3,641	5,542	3,473,819
1938	1,379,962	925,892	525,271	297,549	243,559	122,098	3,825	6,213	3,504,369
1939 <sup>d</sup>	1,392,174	931,724	532,062	299,162	245,064	122,811	5,117	6,699	3,534,813
1940 <sup>d</sup>	1,401,005	949,764	536,775	297,849	244,137	123,225	6,308	7,034	3,566,097
1941 <sup>d</sup>	1,410,344	969,037	538,416	302,022	242,040	121,778	7,217	6,593	3,597,447
1942 <sup>d</sup>	1,428,751	976,663	535,754	303,980	241,568	122,101	6,028	6,213	3,621,058

## FEMALES.

(a) 1800	1,437	..	..	..	..	..	..	..	1,437
1810	3,485	..	..	..	..	496	..	..	3,981
1820	8,398	..	..	..	..	1,361	..	..	9,759
1830	10,688	..	..	..	295	6,171	..	..	17,154
1840	41,908	..	..	6,358	877	13,959	..	..	63,102
1850	111,924	..	..	27,798	2,310	24,641	..	..	166,673
1860	150,695	(b) 207,932	(b) 11,239	61,242	5,749	40,168	..	..	477,025
1870	225,871	326,695	46,051	89,652	9,624	47,369	..	..	745,262
1880	336,190	408,047	87,027	128,955	12,576	54,222	..	..	1,027,017
1890	510,571	538,209	168,864	132,898	19,648	68,334	..	..	1,458,524
1900	644,258	594,440	219,163	176,901	60,879	83,137	(c) 569	..	1,788,347
1910	785,674	654,926	273,503	200,311	118,861	94,937	563	..	2,128,775
1920	1,023,777	774,106	354,069	245,706	154,428	105,493	1,078	(b) 910	2,659,567
1930	1,251,934	900,183	435,177	285,849	198,742	111,792	1,365	3,987	3,189,029
1932	1,276,728	912,724	446,581	289,039	203,271	114,540	1,433	4,004	3,248,320
1933	1,288,680	919,429	451,563	290,955	205,822	115,219	1,448	4,256	3,277,372
1934	1,301,080	927,117	456,992	291,775	207,371	114,495	1,504	4,264	3,304,598
1935	1,313,327	931,313	462,338	292,793	210,516	115,130	1,609	4,314	3,331,340
1936	1,326,243	936,289	467,960	294,505	212,853	116,495	1,709	4,500	3,360,554
1937	1,342,233	940,822	473,772	295,590	215,814	118,121	1,713	4,706	3,392,771
1938	1,355,733	947,868	478,879	297,560	218,902	119,309	1,820	5,251	3,425,322
1939 <sup>d</sup>	1,372,608	954,632	486,415	299,301	222,312	119,611	2,070	5,564	3,462,513
1940 <sup>d</sup>	1,388,118	960,010	492,818	300,242	224,174	119,832	2,544	5,834	3,502,592
1941 <sup>d</sup>	1,401,977	983,116	498,414	303,667	225,042	119,393	2,398	5,768	3,539,775
1942 <sup>d</sup>	1,419,823	993,314	500,725	306,291	228,342	119,336	2,115	5,618	3,575,564

(a) Details as to sex not available for earlier years.

Wales. (c) Previously included with South Australia.

(b) Previously included with New South

(d) See note (d) next page.

ESTIMATED POPULATION—*continued*.

As at 31st Dec.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
PERSONS.									
1788	859	..	..	..	..	..	..	..	859
1790	2,056	..	..	..	..	..	..	..	2,056
1800	5,217	..	..	..	..	..	..	..	5,217
1810	10,096	..	..	..	..	..	..	..	11,566
1820	28,024	..	..	..	..	5,519	..	..	33,543
1830	44,588	..	..	..	1,172	24,279	..	..	70,039
1840	127,468	..	..	14,630	2,311	45,999	..	..	190,408
1850	266,900	..	..	63,700	5,886	68,870	..	..	405,356
1860	348,546	(a) 538,234	(a) 28,056	125,582	15,346	89,821	..	..	1,145,585
1870	497,992	723,925	115,272	184,546	25,135	100,886	..	..	1,647,756
1880	741,142	858,605	211,040	276,393	29,561	114,790	..	..	2,231,531
1890	1,113,275	1,133,728	392,116	318,947	48,502	144,787	..	..	3,151,355
1900	1,360,305	1,196,213	493,847	357,250	179,967	172,900	(b) 4,857	..	3,765,339
1910	1,643,855	1,301,408	599,016	406,868	276,832	193,803	3,301	..	4,425,083
1920	2,091,722	1,527,909	750,624	491,006	331,323	212,752	3,989	(a) 1,972	5,411,297
1930	2,546,353	1,792,605	916,736	574,467	431,610	225,297	4,964	8,719	6,500,751
1932	2,591,731	1,813,387	939,097	579,293	436,320	230,607	4,786	8,564	6,603,785
1933	2,613,519	1,824,179	949,031	582,677	440,264	232,110	4,818	(c) 9,253	6,656,151
1934	2,630,203	1,837,490	959,497	584,294	442,610	231,447	4,944	(c) 9,192	6,705,677
1935	2,657,666	1,843,023	970,719	586,443	447,745	233,108	5,091	(c) 9,319	6,753,114
1936	2,681,736	1,851,593	982,134	589,312	451,557	235,328	5,305	(c) 9,787	6,806,752
1937	2,710,738	1,859,487	993,461	591,201	457,111	238,990	5,354	(c) 10,248	6,866,590
1938	2,735,695	1,873,760	1,004,150	595,109	462,461	241,407	5,645	11,464	6,929,691
1939d	2,764,782	1,886,356	1,018,477	598,463	467,376	242,422	7,187	12,263	6,997,326
1940d	2,780,123	1,918,774	1,020,613	598,091	468,311	243,057	8,852	12,868	7,068,689
1941d	2,812,321	1,952,153	1,036,830	605,689	467,082	241,171	9,615	12,361	7,137,222
1942d	2,848,574	1,969,977	1,036,479	610,271	469,910	241,437	8,143	11,831	7,196,622

(a) Previously included with New South Wales.

(b) Previously included with South Australia.

(c) See letterpress below.

(d) Includes all defence forces enlisted in Australia irrespective of movements subsequent to enlistment.

Estimates of population for intercensal years are obtained by applying the vital and migration statistics for those years to the numbers recorded at the Census. Figures for interstate migration are liable to error owing to the impracticability of tracing movements of motor traffic. The estimates of populations of the Australian Capital Territory and the Northern Territory are particularly affected by this difficulty. A supplementary Census for the Australian Capital Territory taken on 30th June, 1938, revealed considerable understatement in the intercensal estimates of population during the preceding five years. The discrepancy is believed to be due to the unrecorded movements by road, and the following are revised estimates of population at 31st December, based on corrected net migration figures for the years affected—1933, 9,341; 1934, 9,457; 1935, 9,761; 1936, 10,406; and 1937, 11,043. As the corresponding State population estimates are affected by relatively small amounts only, it has been considered desirable to postpone the adjustments involved until the completion of the next Australian Census, when they will be incorporated in the general revision of intercensal population estimates and migration records.

The results of the 1938 Census of the Australian Capital Territory will be found in § 14 of this chapter.



A comparison of annual rates of growth of population of Australia and other countries will be found in § 5 par. 4 of this chapter.

The growth of the population of Australia and of each State thereof is illustrated by the graph accompanying this chapter on page 267.

3. Mean Population.—(i) *Calendar Years.* The following table shows the mean population for each State and Territory for the calendar years 1932 to 1942 :—

#### MEAN POPULATION : CALENDAR YEARS, 1932 to 1942.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Year ended 31st Dec.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
1932 ..	2,579,741	1,808,618	935,575	578,010	435,041	227,084	4,917	8,925	6,577,911
1933 ..	2,601,782	1,820,568	945,454	581,019	438,688	228,434	4,860	(a)9,056	6,629,861
1934 ..	2,623,560	1,830,898	955,584	583,343	441,611	229,161	4,933	(a)9,259	6,678,349
1935 ..	2,645,575	1,839,361	966,198	585,015	445,384	229,616	5,101	(a)9,382	6,725,632
1936 ..	2,667,839	1,847,665	978,589	587,549	450,036	231,046	5,255	(a)9,765	6,777,744
1937 ..	2,694,679	1,856,033	989,668	589,143	454,295	233,951	5,411	a10,195	6,833,375
1938 ..	2,721,196	1,867,818	1,000,749	592,579	459,977	235,678	5,726	11,124	6,894,847
1939 (b)	2,748,671	1,881,865	1,013,539	596,255	465,163	238,072	6,291	11,990	6,961,846
1940 (b)	2,776,154	1,903,941	1,024,807	598,222	468,005	240,243	8,244	12,745	7,032,261
1941 (b)	2,799,155	1,937,133	1,034,799	600,335	467,992	239,417	10,140	13,081	7,102,052
1942 (b)	2,831,021	1,965,998	1,034,222	608,308	470,100	240,119	8,803	12,191	7,170,862

(a) See letterpress following previous table. The following are revised estimates :—1933, 9,078; 1934, 9,435; 1935, 9,735; 1936, 10,295; 1937, 10,902. (b) See footnote (d) to table on page 263.

(ii) *Financial Years.* The mean population for financial years is now widely used in connexion with rates for those statistics which are tabulated over a financial year period. The following table shows the mean population for each State and Territory for the years ended 30th June, 1933 to 1943 :—

#### MEAN POPULATION : FINANCIAL YEARS, 1933 to 1943.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Year ended 30th June—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
1933 ..	2,590,840	1,814,797	940,628	579,422	436,798	227,927	4,867	8,740	6,604,019
1934 ..	2,613,063	1,824,943	950,351	582,394	440,363	229,041	4,883	(a)9,294	6,654,332
1935 ..	2,634,353	1,836,438	960,859	584,162	443,160	229,148	5,020	(a)9,276	6,702,416
1936 ..	2,656,512	1,843,079	972,190	586,197	447,855	230,374	5,164	(a)9,525	6,750,896
1937 ..	2,680,730	1,852,071	984,117	588,300	451,890	232,208	5,320	a10,000	6,804,636
1938 ..	2,708,833	1,861,074	995,333	590,722	457,210	235,048	5,540	a10,458	6,864,218
1939 ..	2,733,936	1,874,967	1,006,831	594,402	462,671	236,926	5,847	11,708	6,927,288
1940 (b)	2,762,598	1,889,975	1,019,804	597,936	467,055	239,189	7,153	12,453	6,996,163
1941 (b)	2,788,356	1,920,664	1,030,306	597,951	468,427	240,065	9,417	13,018	7,068,205
1942 (b)	2,812,651	1,954,295	1,034,956	605,119	468,588	239,388	9,734	12,542	7,137,273
1943 (b)	2,846,131	1,972,754	1,038,810	610,084	470,197	240,707	8,574	11,737	7,198,994

(a) See footnote (c) to table on p. 263. The following are revised estimates :—1933-34, 9,382; 1934-35, 9,540; 1935-36, 9,967; 1936-37, 10,619; 1937-38, 11,180. (b) See footnote (d) to table on page 263.

4. Proportion of Area and Population, Masculinity and Density : States, 1942.—A previous table showed the estimated number of persons in each of the States and Territories on 31st December, 1942. In the following table the percentages of the total

area and of the total population represented by each State or Territory are given, together with the masculinity and the density of population :—

### MASCULINITY AND DENSITY OF POPULATION, 1942.

State or Territory.	Percentage of Total Area.	Percentage of Estimated Population, 31st December, 1942.			Masculinity.(a)	Density.(b)
		Males.	Females.	Persons.		
	%	%	%	%		
New South Wales ..	10.40	39.45	39.70	39.58	100.63	9.21
Victoria ..	2.96	26.98	27.78	27.37	98.32	22.42
Queensland ..	22.54	14.80	14.00	14.40	107.00	1.55
South Australia ..	12.78	8.39	8.57	8.48	99.23	1.61
Western Australia ..	32.81	6.67	6.39	6.53	105.79	0.48
Tasmania ..	0.88	3.37	3.34	3.36	102.32	9.21
Northern Territory ..	17.60	0.17	0.06	0.11	285.01	0.02
Australian Capital Territory	0.03	0.17	0.16	0.17	110.59	12.60
Australia ..	100.00	100.00	100.00	100.00	101.27	2.42

(a) Number of males to each 100 females.

(b) Number of persons per square mile.

Additional information regarding masculinity and density of population appears in later sections of this chapter.

5. Urban and Rural Distribution.—At the Census of 30th June, 1933, information was obtained regarding the distribution of the population amongst urban and rural areas. The metropolitan division of each State includes the capital city and the adjoining urban municipal areas; the urban provincial districts in all States excepting Tasmania were taken for Census purposes as being those cities and towns which are not adjacent to the metropolitan areas, and which are incorporated for local government purposes; the rural area comprises the remainder of the State whether incorporated or not incorporated. In Tasmania the classification of urban and rural populations was made by the Census staff. Persons on board ships in Australian ports or travelling on long distance trains throughout Census night were classed as migratory.

The results obtained at the Census for each State and Territory are shown in the following table :—

### URBAN AND RURAL POPULATION : CENSUS, 30th JUNE, 1933.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Division.	Census, 1933.			Percentage of Total Population of State.		Percentage Increase since the 1921 Census.
	Males.	Females.	Persons.	Census, 1921.	Census, 1933.	
NEW SOUTH WALES.						
Urban—				%	%	%
Metropolitan	591,104	644,163	1,235,267	42.80	47.50	37.40
Provincial ..	283,439	282,001	565,440	25.00	21.74	.70
Rural ..	439,486	355,615	795,101	31.64	30.57	19.64
Migratory ..	4,442	597	5,039	0.56	0.19	—56.99
Total ..	1,318,471	1,282,376	2,600,847	100.00	100.00	23.83

NOTE.—Minus sign (—) denotes decrease.

URBAN AND RURAL POPULATION, ETC.—*continued.*

Division.	Census, 1933.			Percentage of Total Population of State.		Percentage Increase since the 1921 Census.
	Males.	Females.	Persons.	Census, 1921.	Census, 1933.	

## VICTORIA.

Urban—				%	%	%
Metropolitan	464,775	527,159	991,934	50.05	54.49	29.42
Provincial ..	94,790	103,401	198,191	12.24	10.89	5.71
Rural ..	342,233	286,325	628,558	37.33	34.53	9.97
Migratory ..	1,446	132	1,578	0.38	0.09	-72.55
Total ..	903,244	917,017	1,820,261	100.00	100.00	18.87

## QUEENSLAND.

Urban—				%	%	%
Metropolitan	143,525	156,223	299,748	27.77	31.63	42.77
Provincial ..	97,853	101,291	199,144	24.30	21.02	8.40
Rural ..	252,357	192,232	444,589	47.49	46.92	23.84
Migratory ..	3,482	571	4,053	0.44	0.43	23.12
Total ..	497,217	450,317	947,534	100.00	100.00	25.34

## SOUTH AUSTRALIA.

Urban—				%	%	%
Metropolitan	147,936	164,683	312,619	51.57	53.81	22.42
Provincial ..	25,290	26,166	51,456	8.41	8.86	23.58
Rural ..	115,909	98,853	214,762	39.39	36.97	10.10
Migratory ..	1,827	285	2,112	0.63	0.36	-31.74
Total ..	290,962	289,987	580,949	100.00	100.00	17.33

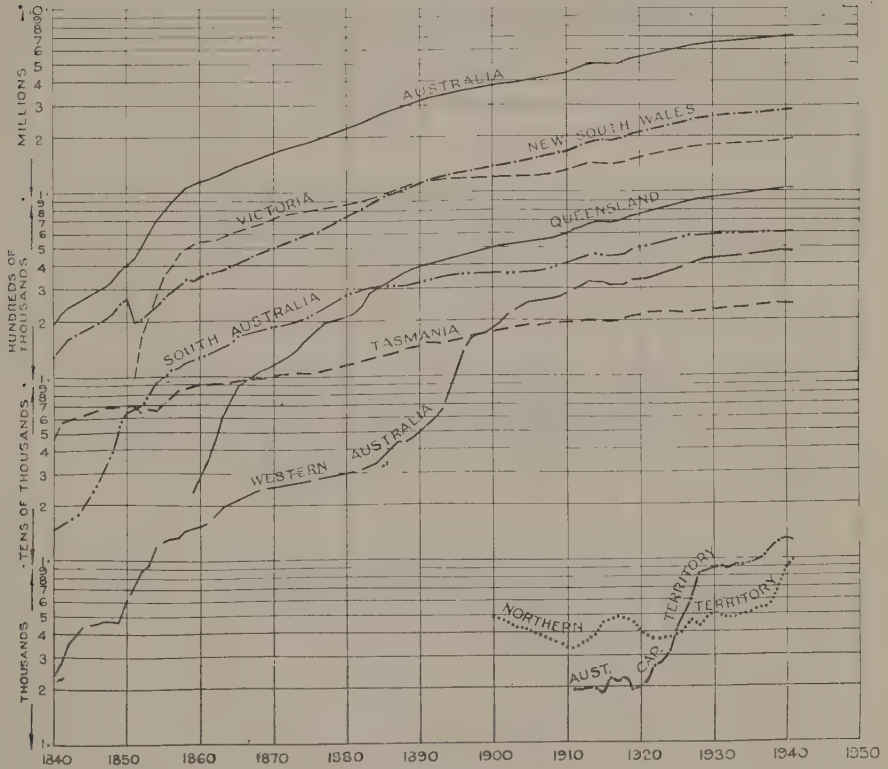
## WESTERN AUSTRALIA.

Urban—				%	%	%
Metropolitan	99,288	108,152	207,440	46.55	47.27	33.94
Provincial ..	23,060	21,745	44,805	12.79	10.21	5.25
Rural ..	108,732	74,677	183,409	39.10	41.79	40.98
Migratory ..	2,857	341	3,198	1.56	0.73	-38.38
Total ..	233,937	204,915	438,852	100.00	100.00	31.89

NOTE.—Minus sign (—) denotes decrease.



POPULATION OF AUSTRALIA, 1840 TO 1911 (RATIO GRAPH).

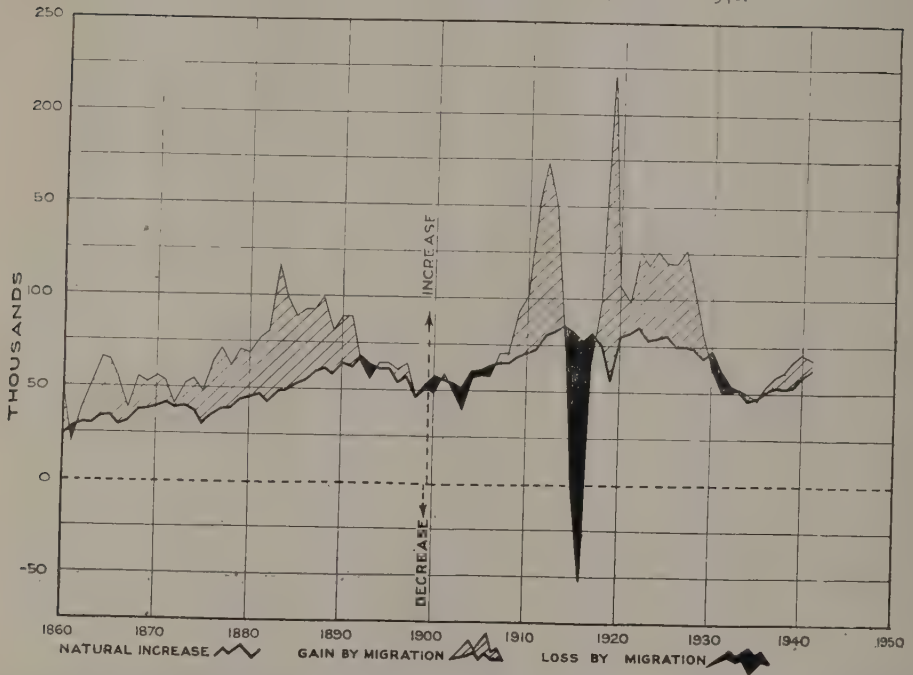


(See page 263.)

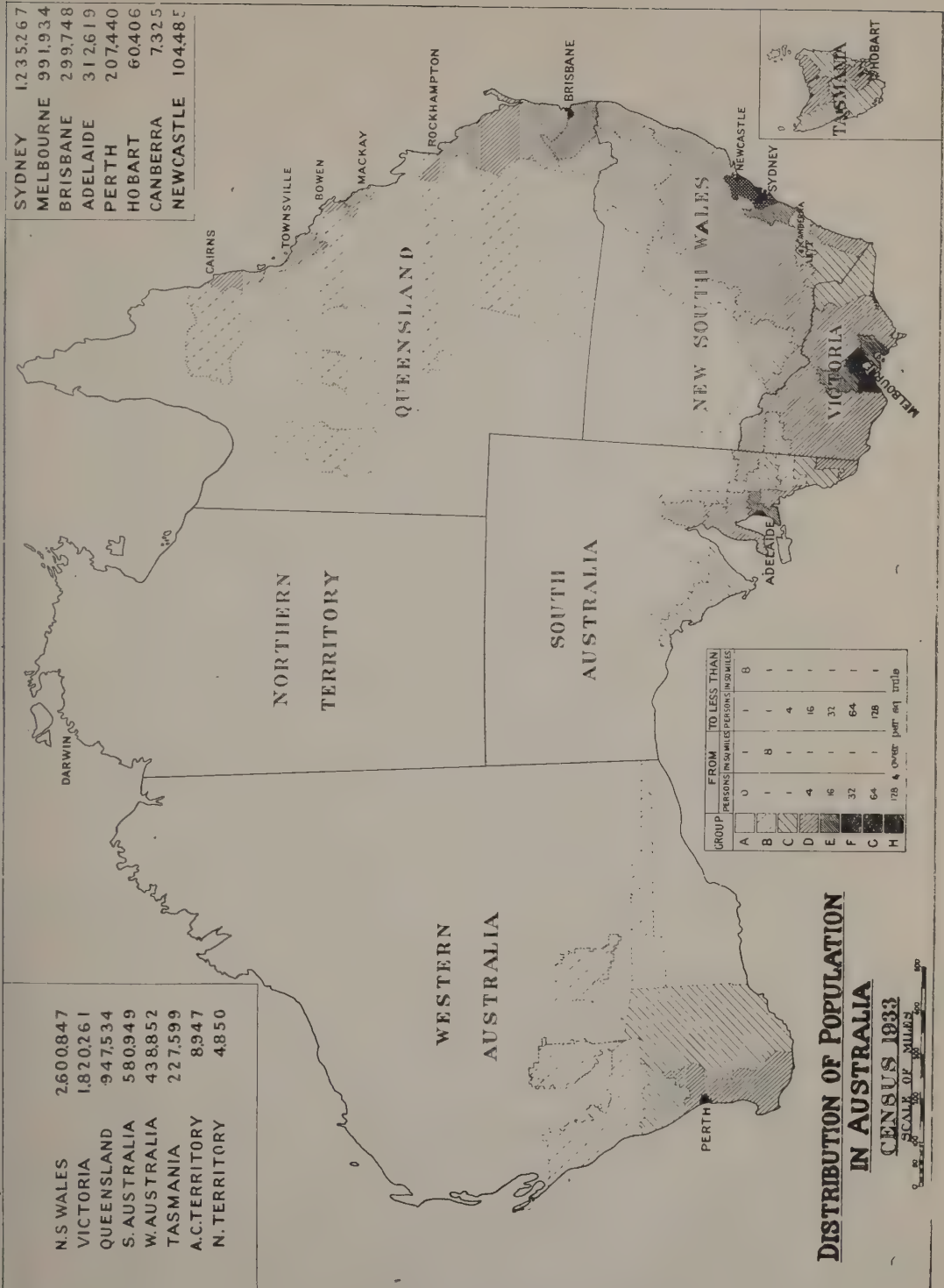
EXPLANATION.—This is a ratio graph, the vertical scale being logarithmic, and the curves rise and fall according to the rate of increase or decrease. Actual numbers are indicated by the scale at the side of the graph.

The curves represent the estimated population of each State at 31st December each year.

## INCREASE OF POPULATION--AUSTRALIA, 1860 TO 1941.

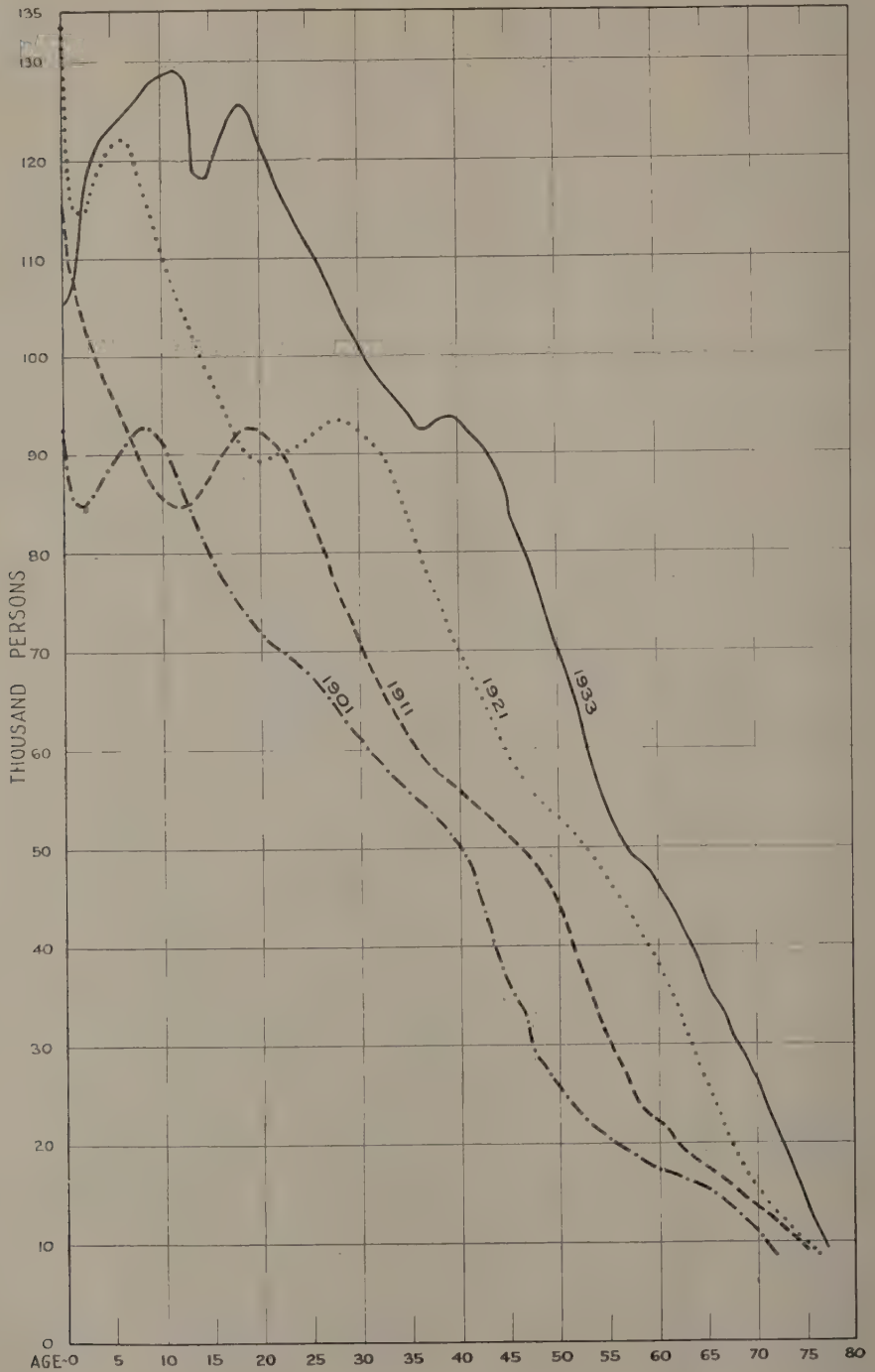


EXPLANATION. --The increase of population each year is represented by the distance between the light curve and the dotted zero line. The distance between the zero line and the heavy curve shows the amount of increase due to natural increase, while the distance between the two curves indicates gain or loss by migration, the shaded areas representing gains by migration and the black areas losses by migration. Where the black area extends below the dotted zero line, as it did during the years of the War of 1914-19, a net loss in population is indicated.





AUSTRALIA—GRADUATED AGE DISTRIBUTION OF POPULATION, CENSUSES OF 1901  
1911, 1921 AND 1933.



EXPLANATION.—This graph affords a comparison between the age distribution of the population at each of the last four censuses.

URBAN AND RURAL POPULATION, ETC.—*continued.*

Division.	Census, 1933.			Percentage of Total Population of State.		Percentage Increase since the 1921 Census.
	Males.	Females.	Persons.	Census, 1921.	Census, 1933.	

## TASMANIA.

Urban—						
Metropolitan	28,351	32,055	60,406	24.49	26.54	15.30
Provincial ..	26,971	29,806	56,777	26.03	24.95	2.04
Rural ..	59,138	50,629	109,767	49.17	48.23	4.42
Migratory ..	637	12	649	0.31	0.28	-0.46
Total ..	115,097	112,502	227,599	100.00	100.00	6.46

## NORTHERN TERRITORY.

Urban—						
Provincial ..	912	654	1,566	36.18	32.29	11.94
Rural ..	2,391	818	3,209	62.14	66.16	33.54
Migratory ..	75	..	75	1.68	1.55	15.38
Total ..	3,378	1,472	4,850	100.00	100.00	25.42

## AUSTRALIAN CAPITAL TERRITORY.

Urban—						
Provincial ..	3,839	3,486	7,325	..	81.87	..
Rural ..	966	656	1,622	99.65	18.13	..
Migratory ..	..	..	..	0.35	..	..
Total	4,805	4,142	8,947	100.00	100.00	247.86

## AUSTRALIA.

Urban—						
Metropolitan	1,474,979	1,632,435	3,107,414	43.01	46.87	32.90
Provincial ..	556,154	568,550	1,124,704	19.09	16.97	8.41
Rural ..	1,321,212	1,059,805	2,381,017	37.35	35.91	17.27
Migratory ..	14,766	1,938	16,704	0.55	0.25	-43.88
Total ..	3,367,111	3,262,728	6,629,839	100.00	100.00	21.97

NOTE.—Minus sign (—) denotes decrease.

At 30th June, 1933, the metropolitan divisions contained 46.87 per cent. of the total population of Australia as compared with 43.01 per cent. at the Census of 1921. Victoria had the largest percentage of population residing in the metropolitan area 3280.—9

(54.49) but was closely followed in this respect by South Australia (53.81). During the intercensal period, however, the highest rates of increase in metropolitan population were experienced in Queensland and New South Wales.

The percentage of population in the rural divisions of Australia declined from 37.35 per cent. on 4th April, 1921, to 35.91 per cent. on 30th June, 1933. Of the States, Tasmania, with 48.23 per cent., had the largest proportion of population residing in the rural sections of the State and Queensland was next with 46.92 per cent. Since the Census of 1921, however, the greatest percentage increase in rural population occurred in Western Australia (40.98 per cent.), which was more than double the average rate of increase for rural areas in Australia.

A feature of the metropolitan population is its high femininity. In 1921, 52.3 per cent. of the metropolitan population was composed of females, and in 1933 the proportion had risen slightly to 52.5 per cent., the proportion being highest in Victoria and Tasmania at 53.1 per cent.

6. Metropolitan Population : Australia and Other Countries.—In Australia there is an abnormal concentration of population in the capital cities, which are the only cities of outstanding importance in the various States. A comparison with the capitals of the more important countries is given in the following table :—

#### METROPOLITAN POPULATION : AUSTRALIA AND OTHER COUNTRIES.

State or Country.	Metropolis.	Year.	Metropolitan Population.
New South Wales .. ..	Sydney .. ..	1941	1,337,000
Victoria .. ..	Melbourne .. ..	"	1,107,000
Queensland .. ..	Brisbane .. ..	"	344,200
South Australia .. ..	Adelaide .. ..	"	350,000
Western Australia .. ..	Perth .. ..	"	230,000
Tasmania .. ..	Hobart .. ..	"	67,900
England .. ..	London (a) .. ..	1938	8,700,000
Scotland .. ..	Edinburgh .. ..	1940	475,500
Northern Ireland .. ..	Belfast .. ..	1939	444,500
Eire .. ..	Dublin .. ..	"	482,300
Canada .. ..	Montreal (b)(c) .. ..	1941	1,139,921
New Zealand .. ..	Wellington .. ..	1940	162,800
Union of South Africa .. ..	Capetown (d) .. ..	1936	173,412
Argentina .. ..	Buenos Aires .. ..	1939	2,364,263
Belgium .. ..	Brussels .. ..	1938	912,774
Czechoslovakia .. ..	Prague .. ..	1937	962,000
Denmark .. ..	Copenhagen .. ..	1935	843,168
Egypt .. ..	Cairo .. ..	1937	1,307,422
France .. ..	Paris .. ..	1936	2,829,746
Germany .. ..	Berlin .. ..	1939	4,332,242
Greece .. ..	Athens .. ..	1938	499,360
Hungary .. ..	Budapest .. ..	1939	1,115,877
Italy .. ..	Rome .. ..	"	1,324,775
Japan .. ..	Tokyo (e) .. ..	"	6,581,100
Netherlands .. ..	Amsterdam .. ..	1938	793,526
Norway .. ..	Oslo .. ..	"	275,000
Portugal .. ..	Lisbon .. ..	"	680,806
Spain .. ..	Madrid .. ..	1940	1,209,074
Sweden .. ..	Stockholm .. ..	1939	580,000
U.S.A. .. ..	New York (c) .. ..	1940	7,454,995
U.S.S.R. (Russia) .. ..	Moscow .. ..	1939	4,137,018

(a) Greater London. (b) Greater Montreal. (c) Principal City. (d) European population.  
(e) Greater Tokyo.

NOTE.—The population of Canberra in 1940 was 11,000.



7. Principal Urban Areas.—The following table gives the population of the principal urban incorporated areas in each State and Territory of Australia at the Census of 30th June, 1933 :—

POPULATION OF PRINCIPAL URBAN INCORPORATED AREAS : AUSTRALIA,  
30th JUNE, 1933.

City or Town.	Population.	City or Town.	Population.
<b>New South Wales—</b>		<b>Queensland—continued.</b>	
Sydney and Suburbs .. ..	1,235,267	Townsville .. ..	25,876
Newcastle and Suburbs .. ..	104,485	Ipswich .. ..	22,498
Broken Hill .. ..	26,925	Cairns .. ..	11,993
Goulburn .. ..	14,849	Bundaberg .. ..	11,466
Cessnock .. ..	14,385	Maryborough .. ..	11,413
Lithgow .. ..	13,444	Mackay .. ..	10,665
East and West Maitland .. ..	12,329	Gympie .. ..	7,744
Lismore .. ..	11,762	Charters Towers .. ..	6,978
Wagga Wagga .. ..	11,631	Warwick .. ..	6,664
Wollongong .. ..	11,403		
Albury .. ..	10,543		
Bathurst .. ..	10,413	<b>South Australia—</b>	
Tamworth .. ..	9,913	Adelaide and Suburbs .. ..	312,619
Orange .. ..	9,634	Port Pirie .. ..	11,677
Fairfield .. ..	8,709	Mount Gambier .. ..	5,542
Grafton and South Grafton .. ..	8,551	Murray Bridge .. ..	3,651
Dubbo .. ..	8,344	Port Augusta .. ..	3,270
Armidale .. ..	6,794	Peterborough .. ..	3,059
Katoomba .. ..	6,445	Port Lincoln .. ..	3,006
Liverpool .. ..	6,315		
Cabramatta and Canley Vale .. ..	6,107		
Parkes .. ..	5,846	<b>Western Australia—</b>	
Forbes .. ..	5,355	Perth and Suburbs .. ..	(a) 207,440
Glen Innes .. ..	5,352	Kalgoorlie and Suburbs .. ..	17,326
Inverell .. ..	5,305	Bunbury .. ..	5,140
Casino .. ..	5,287	Geraldton .. ..	4,984
Cowra .. ..	5,056	Northam .. ..	4,817
		Albany .. ..	4,076
		Collie .. ..	3,784
<b>Victoria—</b>			
Melbourne and Suburbs .. ..	991,934	<b>Tasmania—</b>	
Geelong and Suburbs .. ..	39,223	Hobart and Suburbs .. ..	60,406
Ballarat and Suburbs .. ..	37,411	Launceston and Suburbs .. ..	32,833
Bendigo and Suburbs .. ..	29,137	Devonport .. ..	5,151
Warrnambool .. ..	8,906	Queenstown .. ..	3,809
Mildura .. ..	6,617	Burnie .. ..	3,390
Hamilton .. ..	5,786	Ulverstone .. ..	2,701
Shepparton .. ..	5,698		
Maryborough .. ..	5,631		
Wonthaggi .. ..	5,593	<b>Northern Territory—</b>	
Horsham .. ..	5,273	Darwin .. ..	1,566
Castlemaine .. ..	5,221		
<b>Queensland—</b>			
Brisbane and Suburbs .. ..	299,748	<b>Australian Capital Territory—</b>	
Rockhampton .. ..	29,369	Canberra .. ..	7,325
Toowoomba .. ..	26,423		

(a) Includes the City of Fremantle, 25,224.

8. Provincial Urban Areas.—In par. 5, p. 265, the percentage of the total population of each State which is located in incorporated urban provincial areas is shown. In the following table, however, the aggregate population of all cities and towns, outside the metropolitan area of each State, with 2,000 and 3,000 or more inhabitants is shown, irrespective of whether such centres are incorporated separately or not. In addition, the percentage of the aggregate population of these cities and towns to the total population of the State at the Census of 30th June, 1933, is shown.

# AGGREGATE POPULATION OF CITIES AND TOWNS OF SPECIFIED SIZE : CENSUS, 1933.

State or Territory.	Cities and Towns outside Metropolitan Area with Population of—					
	2,000 and over.			3,000 and over.		
	Number.	Population.	Percentage of Population.	Number.	Population.	Percentage of Population.
			%			%
New South Wales ..	106	567,094	21.80	69	474,150	18.23
Victoria ..	51	266,355	14.63	29	212,686	11.68
Queensland ..	33	233,154	24.61	19	199,496	21.05
South Australia ..	9	37,207	6.40	6	30,205	5.19
Western Australia ..	9	42,572	9.70	7	37,697	8.59
Tasmania ..	6	44,512	19.55	4	39,971	17.56
Australian Capital Territory ..	1	7,325	81.87	1	7,325	81.87
Total ..	215	1,198,219	18.07	135	1,001,530	15.16

9. Principal Cities in the World.—The following table shows the population of the world's largest cities at the latest available dates :—

## POPULATION OF THE WORLD'S LARGEST CITIES.

(Cities in the British Empire are printed in *italics*.)

Country.	City.	Year.	City Population ('000 omitted).	Country.	City.	Year.	City Population ('000 omitted).
England ..	<i>London (a) ..</i>	<i>1938</i>	<i>8,700</i>	Spain ..	Madrid ..	1941	1,100
U.S.A. ..	New York ..	1940	7,455	England ..	<i>Birmingham</i>	<i>1938</i>	<i>1,041</i>
Japan ..	Tokyo (b) ..	1939	6,581	Mexico ..	Mexico City	1940	1,030
Germany ..	Berlin ..	1939	4,332	China ..	Nanking ..	1936	1,019
U.S.S.R. ..	Moscow ..	1939	4,137	Japan ..	Kobe ..	1939	1,006
China ..	Shanghai ..	1936	3,490	Czechoslovakia	Prague ..	1937	962
U.S.A. ..	Chicago ..	1940	3,397	Italy ..	Naples ..	1939	929
Japan ..	Osaka ..	1939	3,394	France ..	Marseilles ..	1936	914
U.S.S.R. ..	Leningrad ..	1939	3,191	Belgium ..	Brussels ..	1938	913
France ..	Paris ..	1936	2,830	Canada ..	<i>Toronto (c) ..</i>	<i>1941</i>	<i>900</i>
Argentina ..	Buenos Aires	1941	2,505	U.S.A. ..	Cleveland ..	1940	878
India ..	<i>Calcutta (c) ..</i>	<i>1941</i>	<i>2,109</i>	Japan ..	Yokohama	1939	866
U.S.A. ..	Philadelphia	1940	1,931	Chile ..	Santiago ..	1938	860
Germany ..	Vienna ..	1939	1,918	U.S.A. ..	Baltimore	1940	859
China ..	Chungking	1940	1,900	U.S.S.R. ..	Kiev ..	1939	846
Brazil ..	Rio de Janeiro	1938	1,850	Denmark ..	Copenhagen	1935	843
Germany ..	Hamburg ..	1939	1,682	U.S.S.R. ..	Kharkov ..	1939	833
U.S.A. ..	Detroit ..	1940	1,623	Germany ..	Munich ..	1939	828
China ..	Peiping ..	1936	1,556	England ..	<i>Liverpool ..</i>	<i>1938</i>	<i>827</i>
U.S.A. ..	Los Angeles	1940	1,504	U.S.A. ..	St. Louis ..	1940	816
India ..	<i>Bombay ..</i>	<i>1941</i>	<i>1,488</i>	U.S.S.R. ..	Baku ..	1939	809
Spain ..	Barcelona ..	1940	1,423	Netherlands	Amsterdam	1939	794
Australia ..	<i>Sydney ..</i>	<i>1941</i>	<i>1,337</i>	Turkey ..	Istanbul ..	1940	789
Italy ..	Rome ..	1939	1,325	China ..	Hankow ..	1931	778
Egypt ..	Cairo ..	1937	1,307	India ..	<i>Madras ..</i>	<i>1941</i>	<i>777</i>
China ..	Tientsin ..	1936	1,292	U.S.A. ..	Boston ..	1940	770
Poland ..	Warsaw ..	1938	1,261	Uruguay ..	Montevideo	1941	770
Japan ..	Nagoya ..	1939	1,249	Germany ..	Cologne ..	1939	768
Italy ..	Milan ..	1939	1,224	England ..	<i>Manchester</i>	<i>1938</i>	<i>733</i>
China ..	Canton ..	1936	1,223	Portugal ..	Lisbon ..	1940	705
Japan ..	Kyoto ..	1939	1,177	Germany ..	Leipzig ..	1939	702
Canada ..	<i>Montreal (d) ..</i>	<i>1941</i>	<i>1,140</i>	Italy ..	Turin ..	1939	700
Scotland ..	<i>Glasgow ..</i>	<i>1940</i>	<i>1,132</i>	Egypt ..	Alexandria	1937	682
Brazil ..	Sao Paulo ..	1936	1,120	Thailand ..	Bangkok ..	1940	681
Hungary ..	Budapest ..	1939	1,116	U.S.A. ..	Pittsburgh	1940	671
Australia ..	<i>Melbourne ..</i>	<i>1941</i>	<i>1,107</i>	Poland ..	Lodz ..	1938	665

(a) Greater London.  
(e) Greater Toronto.

(b) Greater Tokyo.

(c) Includes Howrah.

(d) Greater Montreal.

POPULATION OF THE WORLD'S LARGEST CITIES—*continued*.  
(Cities in the British Empire are printed in Italics.)

Country.	City.	Year.	City Population ('000 omitted).	Country.	City.	Year.	City Population ('000 omitted).
U.S.A. ..	Washington	1940	663	Cuba ..	Havana ..	1939	569
Italy ..	Genoa ..	1939	662	Germany ..	Frankfurt-on- Main ..	1939	547
Germany ..	Essen ..	1939	660	Malaya ..	<i>Singapore</i> ..	1940	544
Rumania ..	Bucharest	1939	648	Germany ..	Dusseldorf	1939	540
U.S.S.R. ..	Gorky ..	1939	644	Germany ..	Dortmund	1939	537
Hong Kong	<i>Hong Kong</i>	1938	641	China ..	Hangchow	1936	537
U.S.A. ..	San Francisco	1940	635	India ..	<i>Delhi</i> ..	1941	533
China ..	Wenchow ..	1931	631	Peru ..	Lima ..	1940	523
Germany ..	Dresden ..	1939	625	England ..	<i>Sheffield</i> ..	1938	520
Germany ..	Breslau ..	1939	615	U.S.S.R. ..	Tiflis ..	1939	519
Netherlands	Rotterdam	1939	612	Argentina	Rosario (Santa Fe)	1941	517
China ..	Changsha ..	1931	607	China ..	Tsingtao ..	1936	515
U.S.S.R. ..	Odessa ..	1939	604	U.S.S.R. ..	Rostov-on- Don ..	1939	510
U.S.A. ..	Milwaukee	1940	587	U.S.S.R. ..	Dnieper- petrovsk	1939	501
U.S.S.R. ..	Tashkent ..	1939	585				
Sweden ..	Stockholm	1939	580				
U.S.A. ..	Buffalo ..	1940	576				
France ..	Lyons ..	1936	571				

### § 5. Elements of Increase.

1. Natural Increase.—(i) *General*. The two factors which contribute to the growth of a population are the “natural increase,” i.e., excess of births over deaths, and the “net migration,” i.e., the excess of arrivals over departures. In earlier issues of the Official Year Book particulars of the natural increase from 1861 are given for each sex and State (see No. 22, p. 899). In the following table particulars for each sex are given in States for each quinquennium from 1901 to 1940 and for the latest eight years. The natural increase for Australia from 1861 to 1942 inclusive was 4,688,710, consisting of 2,172,562 males and 2,516,148 females, and represented 77.38 per cent. of the total increase in population. During the present century the rate of natural increase grew until it reached the maximum rate of 17.44 per thousand of population in 1914, but it steadily declined after that year to 7.07 in 1934. The figure rose to 7.99 per thousand in 1937 following small gains during each of the previous three years, fell slightly in 1939 to 7.72, and rose again to 8.57 in 1942. A graph showing the natural increase in the population of Australia from 1860 onwards appears on p. 268 of this chapter.

For the years 1939 to 1942, “natural increase” has been regarded as excess of births over civilian deaths, i.e., deaths of defence personnel have been excluded.

#### POPULATION : NATURAL INCREASE (a), 1901 to 1942.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
MALES.									
1901-05..	51,179	34,332	16,628	12,149	8,283	7,955	-223	(b)	130,303
1906-10..	64,127	38,948	21,415	14,500	10,762	8,703	-264	(b)	158,191
1911-15..	77,070	46,160	27,497	18,673	12,730	9,386	-201	78	191,393
1916-20..	72,030	41,388	26,894	16,413	9,787	8,673	-125	75	175,135
1921-25..	80,860	49,254	28,941	16,721	10,284	8,543	-68	37	194,572
1926-30..	72,430	43,756	25,645	14,583	11,245	7,001	-131	175	174,704
1931-35..	51,566	25,286	20,627	8,686	8,576	5,810	-93	270	120,728
1936-40..	49,092	26,141	23,145	9,187	9,409	6,040	39	397	123,450
1935 ..	8,899	4,338	3,823	1,455	1,672	972	-20	62	21,201
1936 ..	10,051	4,800	4,563	1,548	1,676	1,036	14	55	23,743
1937 ..	9,865	5,319	4,454	1,788	1,918	1,241	-4	78	24,659
1938 ..	9,446	5,610	4,445	1,946	2,029	1,308	2	60	24,846
1939 ..	9,441	4,949	4,616	1,871	1,985	1,247	..	107	24,216
1940 ..	10,289	5,463	5,067	2,034	1,801	1,208	27	97	25,986
1941 ..	11,187	6,892	5,524	2,334	2,220	1,268	3	124	29,552
1942 ..	10,698	6,882	5,260	2,201	2,046	1,409	-20	164	28,640

(a) Excess of births over deaths. (b) Part of New South Wales prior to 1911.

NOTE.—Minus sign (—) denotes excess of deaths over births.



## POPULATION: NATURAL INCREASE (a)—continued.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia
FEMALES.									
1901-05..	59,163	39,831	22,910	12,701	11,408	8,027	28	(b)	154,128
1906-10..	71,297	42,620	26,048	14,754	13,354	8,522	33	(b)	176,637
1911-15..	87,074	50,258	33,463	19,318	16,262	9,604	62	78	216,119
1916-20..	81,799	42,886	32,273	16,825	13,185	8,821	135	72	195,996
1921-25..	89,438	49,685	34,289	17,595	13,839	8,837	127	82	213,892
1926-30..	80,733	44,417	31,128	15,407	14,406	6,893	126	203	193,313
1931-35..	60,300	28,216	26,036	9,228	12,352	5,953	156	280	142,521
1936-40..	60,628	28,464	28,991	10,057	13,626	6,574	220	437	148,997
1935 ..	11,230	5,090	5,014	1,652	2,329	1,131	34	45	26,525
1936 ..	11,766	5,305	5,599	1,899	2,573	1,158	39	59	28,398
1937 ..	12,397	5,799	5,702	1,950	2,626	1,375	40	87	29,976
1938 ..	11,768	5,779	5,346	1,925	2,878	1,311	31	80	29,118
1939 ..	11,747	5,375	6,202	2,008	2,715	1,331	50	100	29,528
1940 ..	12,950	6,206	6,142	2,275	2,834	1,399	60	111	31,977
1941 ..	13,242	6,992	6,465	2,343	3,129	1,363	91	172	33,797
1942 ..	12,730	7,072	6,284	2,365	2,779	1,460	29	152	32,877
PERSONS.									
1901-05..	110,342	74,163	39,538	24,850	19,751	15,982	-195	(b)	284,431
1906-10..	135,424	81,577	47,463	29,254	24,116	17,225	-231	(b)	334,828
1911-15..	164,144	96,418	60,960	37,991	28,992	18,990	-139	156	407,512
1916-20..	153,829	84,274	59,167	33,238	22,972	17,494	10	147	371,131
1921-25..	170,298	98,939	63,230	34,316	24,123	17,380	59	119	408,464
1926-30..	153,163	88,173	56,773	29,990	25,651	13,894	-5	378	368,017
1931-35..	111,866	53,502	46,663	17,914	20,928	11,763	63	550	263,249
1936-40..	109,720	54,605	52,136	19,244	23,035	12,614	259	834	272,447
1935 ..	20,129	9,428	8,837	3,107	4,001	2,103	14	107	47,726
1936 ..	21,817	10,105	10,162	3,447	4,249	2,194	53	114	52,141
1937 ..	22,262	11,118	10,156	3,738	4,544	2,616	36	165	54,635
1938 ..	21,214	11,389	9,791	3,871	4,907	2,619	33	140	53,964
1939 ..	21,188	10,324	10,818	3,879	4,700	2,578	50	207	53,744
1940 ..	23,239	11,669	11,209	4,309	4,635	2,607	87	208	57,963
1941 ..	24,420	13,884	11,989	4,677	5,349	2,631	94	296	63,349
1942 ..	23,428	13,954	11,544	4,566	4,825	2,875	9	316	61,517

## RATE OF NATURAL INCREASE (c)—PERSONS.

1901-05..	15.59	12.31	15.34	13.92	18.07	17.85	-8.8	(b)	14.60
1906-10..	17.25	13.11	16.99	15.44	18.52	18.37	-12.6	(b)	15.93
1911-15..	18.27	13.91	18.61	17.55	18.76	19.63	-7.6	13.71	17.05
1916-20..	15.69	11.65	16.74	14.51	14.56	17.40	0.43	12.23	14.57
1921-25..	15.47	12.32	15.87	13.28	13.60	16.14	3.13	6.84	14.34
1926-30..	12.51	10.10	12.84	10.58	12.03	12.85	-0.22	9.60	11.72
1931-35..	8.60	5.88	9.87	6.17	9.54	10.33	2.54	12.11	7.94
1936-40..	8.06	5.84	10.42	6.50	10.04	10.71	8.28	14.96	7.90
1935 ..	7.61	5.13	9.15	5.31	8.98	9.16	2.75	10.99	7.09
1936 ..	8.17	5.47	10.39	5.87	9.44	9.50	10.08	11.07	7.70
1937 ..	8.26	5.99	10.26	6.34	10.00	11.18	6.65	15.14	7.99
1938 ..	7.80	6.10	9.78	6.53	10.67	11.11	5.76	12.58	7.83
1939 ..	7.71	5.48	10.68	6.50	10.11	10.84	7.97	17.26	7.72
1940 ..	8.37	6.13	10.94	7.20	9.90	10.85	10.55	16.32	8.24
1941 ..	8.73	7.17	11.59	7.79	11.43	10.99	9.27	22.63	8.92
1942 ..	8.28	7.09	11.16	7.51	10.26	11.07	1.02	25.02	8.57

(a) Excess of births over deaths. (b) Part of New South Wales prior to 1911. (c) Excess of births over deaths per 1,000 mean annual population. (d) Revised rates based on mean population adjusted in accordance with the results of Census of 30th June, 1938.

NOTE.—Minus sign (—) denotes excess of deaths over births.

The table above shows the decline which has taken place in the rate of natural increase in all States of Australia during recent years, the rate for Australia in 1942 being less than half that computed for the peak year 1914, namely, 17.44. During the first five years of the present century the average increment to the population of Australia by this means was about 57,000 persons per annum. The increment rose to a maximum of 82,000 persons per annum in 1921-25, but thereafter fell to 52,650 persons per annum in the quinquennium 1931-35, increasing during 1936-40 to 54,489. During 1940 to 1942, the three complete war years, the average annual increment was 60,943.

(ii) *Comparison with other Countries.* Notwithstanding its low birth-rate Australia has a higher rate of natural increase than most European countries, owing to the fact that its death-rate is very low. The following table gives a comparison between the rates of natural increase in 1941 for the several States of Australia and for the Dominion of New Zealand, with those of some of the principal countries for which such information is available. Corresponding annual rates for the period 1909-1913 have also been appended. Comparisons with the earlier period show how general has been the fall in the rate of natural increase. Unless otherwise indicated, the rates do not include military deaths.

## NATURAL INCREASE OF POPULATION : VARIOUS COUNTRIES.

## INCREASE PER ANNUM PER 1,000 MEAN POPULATION.

State or Country.	1909-13.	1941.	Country.	1909-13.	1941.
Australasia—			Europe—continued.		
Queensland ..	17.9	11.6	Scotland ..	10.7	(c) 3.4
Western Australia	18.1	11.4	England and Wales	10.7	(c) 1.3
Tasmania ..	18.8	11.0	Spain ..	9.3	0.9
New Zealand ..	17.1	10.8	Belgium ..	7.8	(a) -2.5
Australia ..	16.7	8.9	France ..	0.8	-4.4
New South Wales	18.0	8.7			
South Australia ..	16.8	7.8			
Victoria..	13.6	7.2			
			Asia—		
			Japan ..	13.1	14.5
			Africa—		
Europe—			Union of South Africa (whites only)	(e)	(d) 16.0
Netherlands ..	15.1	(a) 10.3			
Denmark ..	13.9	8.2	America—		
Italy ..	12.8	8.0	Canada ..	(e)	12.2
Germany ..	12.8	(b) 6.6	United States ..	(e)	8.3
Switzerland ..	9.3	5.8			
Northern Ireland..	6.3	(c) 5.6			
Norway ..	12.4	(d) 5.6			
Eire ..	6.3	4.4			
Sweden ..	10.4	4.4			

(a) Includes military deaths.  
in home country.

(d) 1940.

(b) Frontiers of 1937.

(e) Not available.

(c) Includes military deaths occurring

NOTE.—Minus sign (—) denotes decrease.

2. *Net Migration.\**—The other factor of increase in the population, namely, the excess of arrivals over departures, known as “net migration,” is, from its nature, much more subject to variations than is the factor of “natural increase”. These variations are due to numerous causes, some of which are referred to in Official Year Book No. 22. pp. 906-7.

\* The subject of migration is dealt with at some length later in this chapter.

Particulars of the increase by net migration are given below for quinquennial periods from 1901 to 1940 and annually for the last eight years :—

POPULATION : INCREASE BY NET MIGRATION, 1901 to 1942.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
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MALES.

1901-05..	15,671	-37,971	495	-11,031	28,127	-1,771	- 697	(a)	-7,177
1906-10..	11,157	9,400	12,291	10,590	711	-5,784	- 366	(a)	37,999
1911-15..	38,483	1,568	13,037	-4,263	189	-9,599	1,050	- 90	40,375
1916-20..	23,150	18,205	3,614	7,920	-3,782	- 67	- 551	30	48,519
1921-25..	35,660	37,760	18,834	14,244	15,375	-5,630	17	1,199	117,459
1926-30..	37,524	7,849	11,584	-2,230	19,069	-3,668	870	2,259	73,257
1931-35..	- 1,646	-5,951	6,195	-3,654	-4,215	-1,384	- 24	3	-10,676
1936-40(b)	7,574	11,913	5,249	-4,988	-2,501	793	2,787	1,632	20,873
1935 ..	317	-3,001	2,053	- 324	318	54	62	15	- 506
1936 ..	1,103	-1,206	1,230	- 391	- 201	- 181	100	227	681
1937 ..	3,147	-1,958	1,061	- 984	675	795	49	177	2,962
1938 ..	2,011	1,617	1,137	- 8	233	- 79	182	611	5,704
1939 (b)..	2,771	883	2,175	- 258	- 480	- 534	1,292	379	6,228
1940 (b)..	- 1,458	12,577	- 354	-3,347	-2,728	- 794	1,164	238	5,298
1941 (b)..	- 1,848	12,381	-3,883	1,839	-4,317	-2,715	906	- 565	1,798
1942 (b)..	10,491	3,030	-6,780	699	-1,636	- 848	-1,185	- 535	3,236

FEMALES.

1901-05..	1,566	-21,984	-2,398	-8,448	22,293	- 726	81	(a)	-9,616
1906-10..	9,390	10	7,780	4,403	1,867	-4,023	- 148	(a)	19,279
1911-15..	48,612	25,051	12,054	5,389	10,650	-5,658	271	118	96,487
1916-20..	21,294	985	2,770	3,863	-4,530	-2,211	47	- 34	22,190
1921-25..	24,660	19,443	12,154	7,482	6,706	-5,138	- 244	744	65,807
1926-30..	33,326	12,532	3,537	- 341	9,363	-4,293	278	2,048	56,450
1931-35..	1,093	2,943	1,125	-2,284	- 578	-2,644	88	47	- 210
1936-40(b)	14,163	9,233	1,509	-2,608	32	-1,872	715	1,083	22,255
1935 ..	1,017	- 894	332	- 634	816	- 496	71	5	217
1936 ..	1,150	- 329	23	- 187	- 236	207	61	127	816
1937 ..	3,593	-1,266	110	- 865	335	251	- 36	119	2,241
1938 ..	1,732	1,267	- 239	45	210	- 123	76	465	3,433
1939 (b)..	5,128	1,389	1,334	- 267	695	-1,029	200	213	7,663
1940 (b)..	2,560	8,172	281	-1,334	- 972	-1,178	414	159	8,102
1941 (b)..	617	7,114	- 889	1,082	-2,261	-1,802	- 237	- 238	3,386
1942 (b)..	5,121	3,131	-3,969	261	523	-1,523	- 312	- 302	2,930

(a) Part of New South Wales prior to 1911.

(b) Civil migration only.

NOTE.—Minus sign (—) indicates the excess of departures over arrivals.



POPULATION: INCREASE BY NET MIGRATION—*continued.*

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
PERSONS.									
1901-05..	17,237	-59,955	-1,903	-19,479	50,420	-2,497	- 616	(a)	-16,793
1906-10..	20,547	9,410	20,071	14,993	2,578	-9,807	- 514	(a)	57,278
1911-15..	87,095	26,619	25,091	1,126	10,839	-15,257	1,321	28	136,862
1916-20..	44,444	19,190	6,390	11,783	-8,312	-2,278	- 504	- 4	70,709
1921-25..	60,320	57,203	30,988	21,726	22,081	-10,768	- 227	1,943	183,266
1926-30..	70,850	20,381	15,121	-2,571	28,432	-7,961	1,148	4,307	129,707
1931-35..	- 553	-3,008	7,320	-5,938	-4,793	-4,028	64	(b) 50	-10,886
1936-40(c)	21,737	21,146	6,758	-7,596	-2,469	-2,665	3,502	2,715	43,128
1935 ..	1,334	-3,895	2,385	- 958	1,134	- 442	133	(b) 20	- 289
1936 ..	2,253	-1,535	1,253	- 578	- 437	26	161	(b) 354	1,497
1937 ..	6,740	-3,224	1,171	-1,849	1,010	1,046	13	(b) 296	5,203
1938 ..	3,743	2,884	898	37	443	- 202	258	1,076	9,137
1939 (c) ..	7,899	2,272	3,509	- 525	215	-1,563	1,492	592	13,891
1940 (c)	1,102	20,749	- 73	-4,681	-3,700	-1,972	1,578	397	13,400
1941 (c) ..	-1,231	19,495	-4,772	2,921	-6,578	-4,517	669	- 803	5,184
1942 (c) ..	15,612	6,161	-10,749	960	-1,113	-2,371	-1,497	- 837	6,166

(a) Part of New South Wales prior to 1911. (b) See footnote (c) to table on p. 263. The following are revised estimates:—1931-35, 492; 1935, 197; 1936, 531; 1937, 472. (c) Civil migration only.

NOTE.—Minus sign (—) indicates the excess of departures over arrivals.

From 1861 to 1942 the increment to the population arising from net migration amounted to 1,370,610 or 22.62 per cent. of the total increase in population. During the 42 years since 1900 the total increase to the population was made up of 2,825,945 or 82.37 per cent. by natural increase, and 604,621 or 17.63 per cent. by net migration.

There was a loss of population by migration in the first five years of the present century; in the next five quinquennial periods there were varying gains which averaged about 115,000 per quinquennium.

In the five years ended 1935 there was a net emigration of 10,886 and in the five years ended 1940 the net immigration was 43,128.

Rates of increase by migration from 1901 to 1940 may be found for each State and Territory of Australia in *Demography Bulletin* No. 58.

3. Total Increase.—The total increase of the population is obtained by the combination of the natural increase with the net migration.

The total increase in each decade from 1861 to 1920 was given in Official Year Book No. 22, p. 902. The total increment to the population from the beginning of the year 1861 to the end of the year 1942 was 6,059,320, while that from 1901 to 1942 was 3,430,566. The annual results for the last eight years are shown below, together with quinquennial figures from 1901 to 1940. A graph showing the increase in the population of Australia from 1860 appears on page 268.

## POPULATION : TOTAL INCREASE, 1901 to 1942.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
MALES.									
1901-05..	66,850	—3,639	17,123	1,118	36,410	6,184	— 920	(a)	123,126
1906-10..	75,284	48,348	33,706	25,090	11,473	2,919	— 630	(a)	196,190
1911-15..	115,553	47,728	40,534	14,410	12,919	— 213	849	— 12	231,768
1916-20..	95,180	59,593	30,508	24,333	6,005	8,606	— 676	105	223,654
1921-25..	116,520	87,014	47,775	30,965	25,659	2,913	— 51	1,236	312,031
1926-30..	109,954	51,605	37,229	12,353	30,314	3,333	739	2,434	247,961
1931-35..	49,920	19,335	26,822	5,032	4,361	4,426	— 117	273	110,052
1936-40(c)	56,666	38,054	28,394	4,199	6,908	5,247	2,826	2,029	144,323
1935 ..	9,216	1,337	5,876	1,131	1,990	1,026	42	77	20,695
1936 ..	11,154	3,594	5,793	1,157	1,475	855	114	282	24,424
1937 ..	13,012	3,361	5,515	804	2,593	2,036	45	255	27,621
1938 ..	11,457	7,227	5,582	1,938	2,262	1,229	184	671	30,550
1939 (c)..	12,212	5,832	6,791	1,613	1,505	713	1,292	486	30,444
1940 (c)..	8,831	18,040	4,713	—1,313	— 927	414	1,191	335	31,284
1941 (c)..	9,339	19,273	1,641	4,173	—2,097	—1,447	909	— 441	31,350
1942 (c) (d)	18,388	7,626	—2,662	1,958	— 472	323	—1,189	— 361	23,611
FEMALES.									
1901-05..	60,729	17,847	20,512	4,253	33,761	7,301	— 109	(a)	144,512
1906-10..	80,687	42,039	33,828	19,157	15,221	4,499	— 115	(a)	195,916
1911-15..	135,686	75,309	45,517	24,707	26,912	3,946	333	196	312,906
1916-20..	103,093	43,871	35,049	20,688	8,655	6,610	182	38	218,156
1921-25..	114,098	69,128	46,443	25,077	20,545	3,699	— 117	826	279,699
1926-30..	114,059	56,949	34,665	15,066	23,769	2,600	404	2,251	249,763
1931-35..	61,393	31,159	27,161	6,944	11,774	3,309	244	327	142,311
1936-40(c)	74,791	37,697	30,500	7,449	13,658	4,702	935	1,520	171,252
1935 ..	12,247	4,196	5,346	1,018	3,145	635	105	50	26,742
1936 ..	12,916	4,976	5,622	1,712	2,337	1,365	100	186	29,214
1937 ..	15,990	4,533	5,812	1,085	2,961	1,626	4	206	32,217
1938 ..	13,500	7,046	5,107	1,970	3,088	1,188	107	545	32,551
1939 (c)..	16,875	6,764	7,536	1,741	3,410	302	250	313	37,161
1940 (c)..	15,510	14,378	6,423	941	1,862	221	474	270	40,079
1941 (c)..	13,859	14,106	5,576	3,425	868	— 439	— 146	— 66	37,182
1942 (c) (d)	17,846	10,198	2,311	2,624	3,306	— 57	— 283	— 150	35,789
PERSONS.									
1901-05..	127,579	14,208	37,635	5,371	70,171	13,485	— 811	(a)	267,628
1906-10..	155,971	90,987	67,534	44,247	26,694	7,418	— 745	(a)	392,106
1911-15..	251,239	123,037	86,051	39,117	39,831	3,733	1,182	184	544,347
1916-20..	198,273	103,404	65,557	45,021	14,660	15,216	— 494	143	441,840
1921-25..	230,618	156,142	94,218	56,042	46,204	6,612	— 168	2,062	591,730
1926-30..	224,013	108,554	71,894	27,419	54,083	5,933	1,143	4,685	497,724
1931-35..	111,313	50,494	53,983	11,976	16,135	7,735	127	(b) 600	252,363
1936-40(c)	131,457	75,751	58,894	11,648	20,566	9,949	3,761	3,549	315,575
1935 ..	21,463	5,533	11,222	2,149	5,135	1,661	147	(b) 127	47,437
1936 ..	24,070	8,570	11,415	2,869	3,812	2,220	214	(b) 468	53,638
1937 ..	29,002	7,894	11,327	1,889	5,554	3,662	49	(b) 461	59,835
1938 ..	24,957	14,273	10,689	3,908	5,350	2,417	291	1,216	63,101
1939 (c)..	29,087	12,596	14,327	3,354	4,915	1,015	1,542	799	67,635
1940 (c)..	24,341	32,418	11,136	— 372	935	635	1,665	605	71,363
1941 (c)..	23,198	33,379	7,217	7,598	—1,229	—1,886	763	— 507	68,533
1942 (c) (d)	36,234	17,824	— 351	4,582	2,828	266	—1,472	— 511	59,400

(a) Part of New South Wales prior to 1911. (b) See footnote (c) to table on p. 263. The following are revised figures:—1931-35, 1,042; 1935, 304; 1936, 645; 1937, 637. (c) Unadjusted for movement of defence forces. (d) Includes recorded deaths of defence personnel. See letterpress p. 261.

NOTE.—Minus (—) denotes decrease.

4. Rates of Increase.—(i) *States.* The annual rates of increase of population of the several States of Australia in each of the years 1938 to 1942 inclusive were as follows :—

## POPULATION : RATES OF INCREASE.

State or Territory.	Annual Rate of Increase of Population.				
	1938.	1939.	1940.	1941.	1942.
	%	%	%	%	%
New South Wales ..	0.92	1.06	0.88	0.83	1.29
Victoria ..	0.77	0.67	1.72	1.74	0.91
Queensland ..	1.08	1.43	1.09	0.70	-0.03
South Australia ..	0.66	0.56	-0.06	1.27	0.76
Western Australia ..	1.17	1.06	0.20	-0.26	0.61
Tasmania ..	1.01	0.42	0.26	-0.78	0.11
Northern Territory ..	5.44	27.32	23.17	8.62	-15.31
Australian Capital Territory ..	11.87	6.97	4.93	-3.94	-4.29
Australia ..	0.92	0.98	1.02	0.97	0.83

NOTE.—Minus sign (—) denotes decrease.

(ii) *Various Countries.* The table hereunder gives approximate rates of increase of the population of Australia and its component States, in comparison with those for other countries :—

## POPULATION : RATES OF INCREASE IN VARIOUS COUNTRIES.

State or Country.	Annual Rate of Increase of Population during period—						
	1901 to 1906.	1906 to 1911.	1911 to 1916.	1916 to 1921.	1921 to 1926.	1926 to 1931.	1931 to 1936.
	%	%	%	%	%	%	%
<b>AUSTRALASIA—</b>							
Australia ..	1.38	2.04	1.87	2.07	2.11	1.50	0.76
New South Wales (a) ..	1.99	2.05	2.61	2.19	2.20	1.74	0.87
Victoria ..	0.17	1.70	1.38	1.68	2.00	1.18	0.53
Queensland ..	1.35	2.77	2.18	2.17	2.38	1.53	1.14
South Australia (b) ..	0.27	2.48	1.47	2.33	2.17	0.81	0.41
Western Australia ..	6.22	2.42	1.77	1.31	2.66	2.56	0.81
Tasmania ..	1.33	0.63	0.43	1.90	0.04	1.01	0.55
New Zealand ..	2.81	2.43	1.56	2.13	2.06	1.38	0.79
<b>EUROPE—</b>							
England and Wales ..	1.04	1.02	-0.84	1.81	0.64	0.44	0.42
Scotland ..	0.55	0.56	0.31	0.24	0.09	-0.21	0.50
Eire ..	-0.22	-0.06	-0.21	0.58	-0.60	-0.12	0.28
Belgium ..	1.26	0.69	0.53	-0.55	1.03	0.71	0.42
Denmark ..	1.12	1.26	1.20	2.13	1.01	0.67	0.84
France ..	0.15	0.06	-0.72	0.55	0.76	0.53	0.02
Germany ..	1.46	1.33	0.71	-1.60	0.37	0.55	0.58
Italy ..	0.52	0.80	1.16	0.22	0.91	0.31	0.63
Netherlands ..	1.53	1.22	1.72	1.16	1.53	1.06	1.26
Norway ..	0.51	0.73	1.01	1.14	0.65	0.42	0.46
Spain ..	0.52	0.87	0.66	0.82	0.65	0.89	1.46
Sweden ..	0.61	0.84	0.70	0.64	0.40	0.29	0.34
Switzerland ..	1.28	1.17	0.81	0.01	0.38	0.62	0.44
<b>ASIA—</b>							
Ceylon ..	1.62	1.20	1.71	1.28	2.30	1.18	1.34
Japan ..	1.29	1.08	1.42	0.37	1.42	1.48	0.77
<b>AMERICA—</b>							
Canada ..	2.99	2.99	2.20	1.81	1.33	1.97	1.23
United States of America ..	2.00	1.82	1.67	1.21	1.67	1.27	0.69

(a) Includes Australian Capital Territory.

(b) Includes Northern Territory.

NOTE.—Minus sign (—) denotes decrease.



(iii) *Variations in the Rates.* The annual rate of increase of the population during the present century has averaged 1.60 per cent., but the results from year to year have deviated widely from this figure. In the following table the period from 1900 to 1939 has been arranged into certain defined groups of years according to the occurrence of influences seriously affecting the growth of population :—

POPULATION : PERIODICAL RATES OF INCREASE.

Period from 31st December.	Interval.	Increase during Period.	Average Annual Increase.	Average Annual Rate of Increase.		
				Natural Increase.	Net Migration.	Total.
	Years.	Million.	Thousand.	%	%	%
1900 to 1913 . .	13	1.13	87	1.59	0.53	2.04
1913 to 1923 . .	10	0.86	86	1.50	0.15	1.64
1923 to 1929 . .	6	0.68	113	1.27	0.64	1.88
1929 to 1939 . .	10	0.56	56	0.82	0.01	0.84

Up to 1913 the rate of natural increase was rising, and this factor, coupled with the impetus given to immigration from 1911 onwards, was responsible for the comparatively high annual rate of 2.04 per cent. during this period. The War of 1914–1919 was a dominating influence in the decade 1914–1923, and its effects can be seen in the reduction of the rate from 2.04 to 1.64 per cent. In the next span from 1923 to 1929 a more settled and prosperous era was experienced; migration was resumed on a large scale and, despite a further decline in the rate of natural increase owing to the persistent fall in the birth-rate, the annual rate of growth rose to 1.88 per cent. After 1929 came the depression, and immigration ceased—in fact Australia actually lost people through an excess of departures over arrivals in 1930, 1931, 1932 and 1935. The rate of natural increase also fell, and the rate of growth of the population receded to 0.84 per cent. per annum. With the opening of hostilities in 1939, Australia entered a new phase in her demographic history, the full effects of which will not be seen for some time to come.

If the population increased at the average rate of the present century, namely, 1.60 per cent., it would double itself in 43 years. It has been estimated, on the assumptions that the 1932–34 birth and death rates remain unchanged and that no increment to the population results from migration, that the average annual rates of natural increase would be for the period 1933–43, 0.73 per cent.; 1933–53, 0.64 per cent.; 1933–63, 0.55 per cent. and 1933–73, 0.46 per cent. In this respect the experience in Australia would be very similar to that of many other countries as the result of the low birth-rate.

Rates of increase from 1901 to 1940 may be found for each State and Territory of Australia in *Demography Bulletin* No. 58, 1940.

## § 6. Seasonal Variations of Population.

1. *Variations in Natural Increase.*—The following notes are based on the experience of the ten years 1931–1940. For Australia as a whole the rate of natural increase was greatest in the quarter ended March, and least in the quarter ended September.

In New South Wales, Victoria, South Australia and Tasmania the March quarter was the most favourable, and in Queensland and Western Australia the June quarter. The natural increase was lowest in New South Wales, Victoria, Queensland, South Australia and Western Australia in the September quarter, and in Tasmania in the June quarter.

2. **Variations in Net Migration.**—For the decade 1931–1940 for Australia as a whole the quarter ended December showed the greatest rate of increase from migration. The greatest gains in New South Wales have on the average occurred in the September quarter, in Victoria in the March quarter, in Queensland and Western Australia in the June quarter, and in South Australia and Tasmania in the December quarter. The gain to the southern States in the quarter ended December is due to oversea traffic and to tourists and sugar workers returning from Queensland, which State loses heavily during the December quarter, but gains in the June quarter by tourists seeking the warmer climate. The increase to Tasmania during the quarter ended December is mainly due to the influx of tourists from the mainland.

## § 7. Influences affecting Increase and Distribution.

In previous issues of the Official Year Book the influence of the various factors affecting the growth and distribution of population was traced. Detailed information on this subject appears in Official Year Book No. 22, pp. 906–7.

## § 8. Density.

1. **General.**—From certain aspects population may be less significant in respect of its absolute amount than in its relation to the area of the country. Australia, with an area of 2,974,581 square miles, and a population on 31st December, 1942, of 7,244,242, including 47,620 full-blood aborigines, has a density of only 2.43 persons to the square mile, and is, therefore, the most sparsely populated of the civilized countries of the world. For the other continents the densities are approximately as follows:—Europe, 121; Asia, 73; Africa, 13; North and Central America, 21; and South America, 13. The population of Australia has thus about one-sixth of the density of South America and of Africa; about one-ninth of that of North and Central America; about one-thirtieth of that of Asia; and about one-fiftieth of that of Europe.

On account of the enormous area of Australia and the unsuitability for settlement of much of the country, the density of population must necessarily increase slowly. In Australia as a whole the figure has increased from 1.29 per square mile in 1901 to 2.43 in 1942. Victoria's density, however, has grown from 13.77 to 22.42, and that of New South Wales from 4.43 to 9.21 in the same period.

A map showing the density of population throughout Australia at the Census of 1933 appears on page 269 of this chapter. When comparing the density of population of the several States consideration should be given to the average annual rainfall distribution in each State as an indication of the climatic influence upon probable population numbers. The area of New South Wales receiving less than 10 inches of rainfall is 20 per cent.; Victoria, nil; Queensland, 13 per cent.; South Australia, 83 per cent.; Western Australia, 58 per cent.; Tasmania, nil; and Australia, 38 per cent.

Particulars concerning the number and density of the population of the most important countries of the world at 31st December, 1938, are given in the following table. These figures have been taken, with the exception of those for China, Afghanistan, and Australia, from the *Statistical Year Book of the League of Nations*, 1939–40. The figures for China and Afghanistan were taken from the *Statesman's Year Book*, 1940. In some instances, more particularly in the cases of Asia and Africa, the numbers must be considered as rough approximations only.

## POPULATION OF THE WORLD : NUMBER AND DENSITY, 1938.

Country.	Population. ( <sup>'000 omitted</sup> )	Density. ( <sup>a</sup> )	Country.	Population. ( <sup>'000 omitted</sup> )	Density. ( <sup>a</sup> )
EUROPE.			AFRICA.		
U.S.S.R. (European) ..	134,400	58.0	Nigeria and Protectorate (f) ..	20,583	55.2
Germany (b) ..	79,354	352.0	Egypt ..	16,380	42.4
United Kingdom ..	47,600	506.4	French West Africa ..	14,800	8.1
Italy (c) ..	44,487	339.6	Belgian Congo ..	10,329	11.4
France ..	41,980	197.1	Union of South Africa ..	10,070	21.3
Poland ..	35,090	233.9	Algeria ..	7,490	8.8
Spain (incl. Canary Is.) ..	25,600	132.0	French Morocco ..	6,500	42.2
Rumania ..	19,852	174.1	Anglo-Egyptian Sudan ..	6,342	6.5
Yugoslavia ..	15,490	161.4	Abyssinia ..	5,500	15.9
Hungary ..	10,789	246.8	Other ..	57,506	..
Netherlands ..	8,727	671.3	Total Africa ..	155,500	13.3
Belgium ..	8,386	698.8	NORTH AND CENTRAL AMERICA.		
Portugal ..	7,460	213.1	United States of America ..	130,300	43.0
Greece ..	7,108	142.2	Mexico ..	19,640	25.8
Sweden ..	6,310	36.5	Canada ..	11,255	3.0
Bulgaria ..	6,273	156.8	Cuba ..	4,228	96.1
Switzerland ..	4,210	263.1	Other ..	17,387	..
Denmark ..	3,819	224.6	Total North and Central America ..	182,810	21.1
Finland ..	3,659	24.7	SOUTH AMERICA.		
Ire ..	2,936	108.7	Brazil ..	44,116	13.4
Norway ..	2,921	23.4	Argentina ..	12,957	12.0
Other ..	18,049	..	Colombia ..	8,800	20.0
Total Europe ..	534,500	121.2	Peru ..	7,200	14.9
ASIA.			Chile ..	4,035	16.1
China and Dependencies ..	457,835	106.8	Other ..	13,592	..
British India and Indian States ..	365,900	232.3	Total South America ..	91,300	13.2
Japan and Dependencies ..	104,390	398.4	OCEANIA, ETC.		
Netherlands Indies (d) ..	68,400	93.1	Australia (g) ..	6,981	2.3
U.S.S.R. (Asiatic) ..	36,000	6.1	New Zealand and Dependencies ..	1,636	15.7
French Indo-China ..	23,500	82.1	Territory of New Guinea ..	670	7.2
Philippine Islands ..	16,250	142.5	Hawaii ..	413	59.0
Burma ..	15,958	68.2	Papua ..	280	3.1
Turkey (e) ..	15,750	54.9	Fiji ..	211	30.1
Iran ..	15,000	23.7	Other ..	479	..
Thailand ..	14,900	74.5	Total Oceania, etc. ..	10,670	3.2
Afghanistan ..	10,000	39.8	SUMMARY.		
Arabia ..	7,000	7.0	Europe ..	534,500	121.2
Ceylon ..	5,944	237.8	Asia ..	1,181,335	72.8
Nepal ..	5,600	103.7	Africa ..	155,500	13.3
Other ..	18,908	..	America, North and Central ..	182,810	21.1
Total Asia ..	1,181,335	72.8	America, South ..	91,300	13.2
			Oceania, etc. ..	10,670	3.2
			Total ..	2,156,115	42.1

(a) Number of persons per square mile. (b) Includes Austria and Sudeten Territory.  
(c) Includes Albania. (d) Includes Dutch New Guinea. (e) Excludes European Territory—1,330,000. (f) Includes British Cameroons. (g) Includes 51,000 full-blood aborigines.

2. Position of the British Empire.—The approximate relationship of the British Empire to the world as a whole in regard to its area and population is given hereunder :—

## AREA AND POPULATION : BRITISH EMPIRE AND WORLD.(a)

Particulars.	The World.	British Empire.
Area in square miles (excluding Polar Circles) ..	51,235,000	13,353,952
Population ..	2,156,115,000	500,774,000
Population per square mile ..	42.08	37.50

(a) Statistical Year Book of the League of Nations, 1939-40, and The Statesman's Year Book, 1940.

## § 9. General Characteristics.

1. Sex Distribution.—(i) General. Detailed information respecting the distribution of the sexes in the population of Australia appears in previous issues of the Official Year Book. (See No. 22, p. 910.)



(ii) *Masculinity*.—(a) *States*. The number of males to each hundred females has been adopted as a measure of the "masculinity" of the population. On pp. 163-5 in the second issue of the Official Year Book a table was included showing the masculinity of the population of each of the States for each year from 1796 to 1907. In the fifth issue, on p. 123, the figures in this table for the years 1901 to 1907 were modified in accordance with the results of the Census of 3rd April, 1911.

With the exception of some dislocation arising from the War of 1914-1919 there has been a continuous diminution of the masculinity of the population. In 1900, the masculinity was 110.55; in 1910, 107.87 and in 1920, 103.47. After 1921, however, the masculinity tended to rise until 1927 (104.54), since when it has gradually fallen to 101.27 in the year 1942.

The following table shows the masculinity of the population at quinquennial periods from 1901 to 1935 and for each year from 1938 onwards:—

**POPULATION : MASCULINITY, 1901 to 1942.**

(Males per 100 Females.)

As at 31st December—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Aust.
1901 .. ..	110.12	101.16	125.78	102.71	155.69	107.90	593.32	..	110.15
1905 .. ..	111.05	97.60	121.75	101.65	141.35	106.09	496.76	..	108.65
1910 .. ..	109.23	98.71	119.02	103.12	132.90	104.14	486.32	(a)	107.87
1915 .. ..	105.66	95.07	114.74	98.26	117.23	99.77	400.33	109.75	103.55
1920 .. ..	104.31	97.38	112.00	99.83	114.55	101.67	270.04	116.70	103.47
1925 .. ..	104.09	99.71	110.94	102.02	115.76	100.90	297.61	132.37	104.24
1930 .. ..	103.39	99.14	110.66	100.97	117.17	101.53	263.66	118.69	103.85
1935 .. ..	102.36	97.90	109.96	100.29	112.69	102.46	216.41	116.02	102.71
1938 .. ..	101.79	97.68	109.69	100.00	111.26	102.34	210.16	118.32	102.31
1939 .. ..	101.61	97.69	109.23	99.80	109.77	101.97	236.86	120.40	102.09
1940 .. ..	100.93	98.01	108.92	99.20	108.91	102.83	247.96	120.57	101.81
1941 .. ..	100.60	98.57	108.08	99.46	107.55	102.00	300.96	114.30	101.63
1942 .. ..	100.63	98.32	107.00	99.23	105.79	102.32	285.01	110.59	101.27

(a) Part of New South Wales prior to 1911.

(b) *Various Countries*. The difference between young and old countries in the masculinity of their population is clearly illustrated by the comparisons furnished in the following table, which are based on the latest statistics available:—

**POPULATION : MASCULINITY IN VARIOUS COUNTRIES.**

Country.	Year.	Number of Males to each 100 Females.	Country.	Year.	Number of Males to each 100 Females.
Canada .. ..	1941	105.3	Norway .. ..	1939	96.3
Eire .. ..	1936	105.0	Spain .. ..	1940	95.9
Union of South Africa (a)	1939	102.8	Germany .. ..	1939	95.8
<b>Australia</b> .. ..	<b>1942</b>	<b>101.3</b>	Hungary .. ..	1939	95.7
United States of America	1940	101.1	Poland .. ..	1938	95.3
Japan .. ..	1939	100.4	U.S.S.R. (Russia)	1939	94.8
Netherlands .. ..	1939	99.6	Northern Ireland	1939	94.7
New Zealand .. ..	1941	98.2	Italy .. ..	1936	94.3
Sweden .. ..	1939	98.2	France .. ..	1940	93.0
Belgium .. ..	1938	98.0	Scotland .. ..	1938	92.9
Denmark .. ..	1940	97.4	England and Wales	1938	92.4

(a) White population only.

2. *Age Distribution*.—The age distribution of the population is obtained only at a Census. The following table shows the variation which took place in the age constitution of the population during the 12½ years following the 1921 Census. Reference to the graph on page 270 will show regular wave-like movements in the curves depicting age

constitution at various Censuses owing to fluctuations in the birth-rate and in migration. The curve of age constitution for the 1921 Census showed definite troughs in the age-group 0 to 4 years owing to the decline in the birth-rate during the war years, and in the age-group 20 to 24 years owing to the decline in the birth-rate in the late 'nineties of last century and to the loss of young adult males during the War of 1914-1919. At the 1933 Census these same troughs were still prominent, but owing to the lapse of time they then showed at the later ages of 12 to 16 years and 32 to 36 years. But for all ages below about 10 years the curve had been depressed to an extent which was even more marked than in 1921. This was due to a serious decline in the birth-rate, which was intensified in the years immediately prior to 1933 by the economic depression.

Of the 6,629,839 persons enumerated at the 1933 Census, 8.6 per cent. were under 5 years of age; 9.5 per cent. were 5 years of age and under 10 years; 9.4 per cent. from 10 to 14 years; 9.3 per cent. 15 to 19 years; and 38.6 per cent. were under age 21. At the 1921 Census 11.0 per cent. were under 5 years; 11.0 per cent. 5 to 9 years; 9.7 per cent. 10 to 14 years; 8.6 per cent. 15 to 19 years; and 41.9 per cent. under 21 years of age.

The effect of the decline in the birth-rate on the number of young lives in the population is indicated by comparing the experience during the intercensal period from 1921 to 1933 with that for the previous intercensal period from 1911 to 1921. Whereas during the earlier period of ten years the population under 10 years of age in Australia increased by 213,822 persons, there was actually a decline of 693 in the numbers of this age-group during the subsequent 12½ years to 1933. Had the average effective birth-rate which prevailed between the Censuses of 1911 and 1921 continued until the 30th June, 1933, there would have been about 350,000 more children under 10 years of age in Australia than were actually enumerated at the Census.

On the other hand, the number of persons aged 65 years and over in Australia at 30th June, 1933, was 188,630 more than at the previous Census, as compared with an increase of 48,813 during the previous intercensal period from 1911 to 1921.

**POPULATION: GRADUATED AGE DISTRIBUTION, AUSTRALIA, 1921 AND 1933.**  
(EXCLUDING FULL-BLOOD ABORIGINALS.)

Age last Birthday. Years.	Census 1921.			Census 1933			Increase 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
0-4 .. .. .	305,397	294,319	599,716	290,461	278,502	568,963	- 30,753
5-9 .. .. .	302,481	294,836	597,317	318,937	308,440	627,377	30,060
10-14 .. .. .	266,289	260,556	526,845	317,524	307,098	625,222	98,377
15-19 .. .. .	236,268	230,424	466,692	311,790	303,619	615,409	148,717
20-24 .. .. .	219,013	231,680	450,693	297,993	286,612	584,605	133,912
25-29 .. .. .	226,692	237,497	464,189	277,461	256,509	533,970	69,781
30-34 .. .. .	227,512	221,988	449,500	251,513	237,663	489,176	39,676
35-39 .. .. .	198,870	190,405	389,275	228,658	237,498	466,156	76,881
40-44 .. .. .	168,889	160,437	329,326	229,828	226,473	456,301	126,975
45-49 .. .. .	146,203	136,520	282,723	209,329	199,389	408,718	125,995
50-54 .. .. .	134,828	118,982	253,810	171,687	162,780	334,467	80,657
55-59 .. .. .	117,275	100,550	217,825	132,320	128,857	261,177	43,352
60-64 .. .. .	89,502	77,501	167,003	114,864	113,744	228,608	61,605
65-69 .. .. .	56,530	49,184	105,714	92,940	90,493	183,433	77,719
70-74 .. .. .	33,325	31,849	65,174	66,015	64,282	130,297	65,123
75-79 .. .. .	19,586	20,373	39,959	35,929	36,259	72,188	32,229
80-84 .. .. .	9,553	10,334	19,887	13,857	15,740	29,597	9,710
85-89 .. .. .	3,658	4,198	7,856	4,643	6,228	10,871	3,015
90-94 .. .. .	848	1,064	1,912	1,147	1,607	2,754	842
95-99 .. .. .	129	157	286	190	302	492	206
100-104 .. .. .	22	10	32	25	33	58	26
Total .. .. .	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105
Under 21 years .. .. .	1,154,998	1,125,025	2,280,023	1,300,253	1,258,310	2,558,563	278,540
21 years and over .. .. .	1,607,872	1,547,839	3,155,711	2,066,858	2,004,418	4,071,276	915,565
Total .. .. .	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

NOTE.—Minus sign (—) denotes decrease.

The ages recorded at a Census are not free from error and are therefore subjected to a process of graduation, or smoothing, to eliminate the effects of the tendency to mis-statement at certain ages. These graduated results have been used in the table on page 286.

Owing to the striking changes which are taking place in the age distribution of the population of Australia, consequent upon the lower birth-rate and the increasing expectation of life, efforts have been made to estimate these particulars for later years by applying to the age distribution at the Census the subsequent experience of births, deaths and migration. The results of this tabulation are shown in the following summary:—

POPULATION : ESTIMATED AGE DISTRIBUTION, AUSTRALIA, 30th JUNE, 1941.  
(EXCLUDING FULL-BLOOD ABORIGINALS.)

Age last Birthday.					30th June, 1941.		
					Males.	Females.	Persons.
Years—							
0-4	..	..	..	..	300,742	288,849	589,591
5-9	..	..	..	..	265,115	255,568	520,683
10-14	..	..	..	..	307,825	296,049	603,874
15-19	..	..	..	..	323,983	314,995	638,978
20-24	..	..	..	..	307,303	298,101	605,404
25-29	..	..	..	..	307,521	299,939	607,460
30-34	..	..	..	..	287,188	273,667	560,855
35-39	..	..	..	..	257,073	238,210	495,283
40-44	..	..	..	..	236,470	235,609	472,079
45-49	..	..	..	..	221,398	228,564	449,962
50-54	..	..	..	..	212,961	211,328	424,289
55-59	..	..	..	..	171,719	169,251	340,970
60-64	..	..	..	..	133,856	136,584	270,440
65-69	..	..	..	..	96,779	102,539	199,318
70-74	..	..	..	..	75,285	82,195	157,480
75-79	..	..	..	..	45,949	51,079	97,028
80-84	..	..	..	..	22,813	27,346	50,159
85-89	..	..	..	..	6,249	8,383	14,632
90-94	..	..	..	..	1,286	2,044	3,330
95-99	..	..	..	..	195	274	469
100-104	..	..	..	..	9	13	22
Total	..	..	..	..	3,581,719	3,520,587	7,102,306
Under 21 years	..	..	..	..	1,264,472	1,219,767	2,484,239
21 years and over	..	..	..	..	2,317,247	2,300,820	4,618,067
Total	..	..	..	..	3,581,719	3,520,587	7,102,306

Since the publication of Official Year Book No. 34, 1941, a revision in the basis of the estimates in the above table has been found necessary. Results of the 1939 National Register indicated that the graduated figures for the 1933 Census smoothed out features of the age distribution which were not merely due to mis-statements. The basis of estimate was therefore altered to the "adjusted" 1933 Census results, modified in the light of the results of the National Register. In consequence, the estimates here shown are not comparable with those previously published.

The next table shows the change which has been taking place in the age constitutions of the population of Australia since the year 1871. Each successive Census except 1921 has revealed a larger percentage of the population over 15 years of age than was recorded at the previous Census. This movement, as previously mentioned, was greatly accentuated during the period 1921 to 1933 owing to the serious decline in the birth-rate



which was partly the outcome of the economic depression. This change resulted during the intercensal period in an increase in the average age of males in Australia from 28.54 to 30.46 years and of females from 28.03 to 30.64 years. From 1911 to 1921 the average age for males and the average age for females were rapidly approaching equality with the former still somewhat higher than the latter. By 1933 the average age of females actually exceeded that of males. The higher average age of males in earlier years was due to a relatively larger proportion of the population being immigrants, a majority of whom were males. As the proportion of native born increases the tendency is for females, whose average life is longer, to exceed males both in number and average age.

POPULATION : AGE DISTRIBUTION, AUSTRALIA, 1871 TO 1933.

Census Year.	Males.				Females.				Persons.			
	Under 15 years.	15 and under 65.	65 and over.	Total.	Under 15 years.	15 and under 65.	65 and over.	Total.	Under 15 years.	15 and under 65.	65 and over.	Total.
	%	%	%	%	%	%	%	%	%	%	%	%
1871	38.84	59.11	2.05	100	46.02	52.60	1.38	100	42.09	56.17	1.74	100
1881	36.36	60.81	2.83	100	41.86	56.03	2.11	100	38.89	58.61	2.50	100
1891	34.80	62.01	3.19	100	39.38	58.09	2.53	100	36.92	60.19	2.89	100
1901	33.89	61.80	4.31	100	36.51	59.88	3.61	100	35.14	60.88	3.98	100
1911	30.84	64.82	4.34	100	32.52	63.28	4.20	100	31.65	64.08	4.27	100
1921	31.64	63.88	4.48	100	31.79	63.83	4.38	100	31.71	63.86	4.43	100
1933	27.53	66.09	6.38	100	27.42	65.99	6.59	100	27.48	66.04	6.48	100

3. **Conjugal Condition.**—Of the total population of Australia at the 1933 Census, 55.5 per cent. had never married; 39.2 per cent. were married; 5.0 per cent. widowed; and 0.3 per cent. divorced. Since the 1921 Census the number never married had increased by 15.4 per cent.; those married by 29.8 per cent.; the widowed by 37.9 per cent.; and the divorced by 148 per cent.

The relatively low rate of increase in the number of single persons under age 15 is another symptom of the falling birth-rate. At 30th June, 1933, the number of males aged 15 years and over who had never married was 193,139 more than the females, and the excess of males was 40,721 greater than at the previous Census.

The divorce-rate for the period 1911–1920 was 8.1 per 10,000 existing marriages, but increased to nearly double (15.5) during the decennium 1921–1930. During the intercensal period widowed females increased in number by 63,700, and at a higher percentage rate of increase (39.9) than the widowed males (33.3) during the same period. Actually there were more than twice as many widowed females as widowed males in Australia at 30th June, 1933. This disparity is the result of two influences. The first is the greater longevity of females coupled with the usually younger age at marriage; and the second is that a larger proportion of males cancel their widowhood by remarriage.

The numbers of divorced males and females in this table differ slightly from those given on p. 189 where the conjugal conditions of those for whom particulars were not given at the Census have been distributed proportionally among the various groups.

POPULATION : CONJUGAL CONDITION, AUSTRALIA, 1921 AND 1933.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Conjugal Condition.			Census 1921.			Census 1933.			Increase 1921–1933.
			Males.	Females.	Persons.	Males.	Females.	Persons.	
Never Married—									
Under age 15	..		875,098	849,906	1,725,004	926,924	894,643	1,821,567	96,563
Age 15 and over	..		801,797	649,379	1,451,176	1,018,587	825,448	1,844,035	392,859
Total	..	..	1,676,895	1,499,285	3,176,180	1,945,511	1,720,091	3,665,602	489,422
Married	..	..	999,274	999,388	1,998,662	1,290,693	1,293,922	2,593,615	594,953
Widowed	..	..	73,341	164,480	237,821	97,775	230,180	327,955	90,134
Divorced	..	..	4,230	4,298	8,528	10,251	10,862	21,113	12,585
Not Stated	..	..	9,130	5,413	14,543	13,881	7,673	21,554	7,011
Total	..	..	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

4. **Dependent Children under 16 years of Age.**—In reply to this question, 804,595 males and 61,417 females stated they had children under 16 years of age dependent on them at 30th June, 1933, the total number of dependent children under age 16 claimed being 1,919,859, of whom 1,811,247 or 94.3 per cent. were dependent on males and 108,612 or 5.7 per cent. were dependent on females. This represented an average of 2.3 for each male with dependent children and 1.8 for each female with dependent children. For each adult male in Australia there was an average of 0.88 dependent children, and for each male breadwinner (excluding pensioners) an average of 0.81 dependent children under 16 years of age.

Thirty-eight per cent. of the males with dependent children under 16 years of age had one dependent child; 29 per cent. two children; 16 per cent. three children; 9 per cent. four children; 4 per cent. five children; and 4 per cent. more than five children. Of the females with dependent children under 16 years of age, 57 per cent. had one dependent child; 24 per cent. two children; 11 per cent. three children; 5 per cent. four children; 2 per cent. five children; and 1 per cent. more than five children.

**POPULATION : PERSONS WITH DEPENDENT CHILDREN UNDER SIXTEEN YEARS OF AGE, AUSTRALIA, 1933.**

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Number of Dependent Children.	Number of Persons with Dependent Children.			Total Number of Children Dependent on—		
	Males.	Females.	Persons.	Males.	Females.	Persons.
1 .. ..	306,695	34,823	341,518	306,695	34,823	341,518
2 .. ..	233,167	14,631	247,798	466,334	29,262	495,596
3 .. ..	131,646	6,724	138,370	394,938	20,172	415,110
4 .. ..	69,485	3,067	72,552	277,940	12,268	290,208
5 .. ..	34,676	1,337	36,013	173,380	6,685	180,065
6 .. ..	17,270	557	17,827	103,620	3,342	106,962
7 .. ..	7,497	185	7,682	52,479	1,295	53,774
8 .. ..	2,931	75	3,006	23,448	600	24,048
9 .. ..	964	15	979	8,676	135	8,811
10 .. ..	281	3	284	2,810	30	2,840
11 .. ..	69	..	69	759	..	759
12 .. ..	14	..	14	168	..	168
Total ..	804,695	61,417	866,112	1,811,247	108,612	1,919,859

5. **Orphanhood.**—The number of children under 16 years of age in Australia at 30th June, 1933, totalled 1,941,050, of whom 51 per cent. were males and 49 per cent. females. Of all children for whom particulars were stated, 94.0 per cent. had both parents living; 3.6 per cent. were without father living; 2.1 per cent. without mother; and 0.3 per cent. were bereft of both parents.

**POPULATION : ORPHANHOOD OF CHILDREN UNDER SIXTEEN YEARS OF AGE, AUSTRALIA, 1933.**

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Particulars.	Males.	Females.	Persons.
Both Parents Living .. ..	915,707	884,174	1,799,881
Father Dead .. ..	34,642	33,998	68,640
Mother Dead .. ..	20,204	19,642	39,846
Both Parents Dead .. ..	3,144	2,713	5,857
Not Stated .. ..	13,813	13,013	26,826
Total .. ..	987,510	953,540	1,941,050

6. Religion.—At the 1921 Census 92,258 persons in Australia, or 1.7 per cent., gave no reply to this question, but at the 1933 Census, when the public was informed there was no legal obligation to answer this question, 848,948 persons, or 12.8 per cent., gave no reply. Thus 14.0 per cent. of the male and 11.5 per cent. of the female population of Australia did not state their religion.

The greatest numerical increase during the intercensal period was recorded by the Church of England, followed by the Roman Catholic and Catholic undefined, which may be grouped without serious error as the latter term usually signified Roman Catholic. Then followed Presbyterian and Methodist. The greatest proportional increases, however, were recorded by the Christian Scientist, Greek Catholic and Seventh Day Adventist denominations, whilst the greatest proportional decreases were experienced by the Australian Church, Quakers and Latter Day Saints.

Ninety-nine per cent. of those who stated their religion professed the Christian faith as compared with 98 per cent. at the 1921 Census. Since the previous Census the number who stated they were of non-Christian religion decreased by 20 per cent., and those specifically stating they had no religion decreased by 43 per cent. These comparisons with the 1921 figures, however, need to be interpreted with some care, in view of the fact that at the 1933 Census so large a proportion of the population gave no reply to this question.

### POPULATION : RELIGION, AUSTRALIA, 1921 AND 1933.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Religion.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Christian—							
Baptist .. ..	49,194	56,509	105,703	49,654	56,220	105,874	171
Brethren .. ..	5,493	6,532	12,025	4,501	5,542	10,043	- 1,982
Catholic, Greek .. ..	3,938	1,434	5,372	8,435	3,476	11,911	6,539
Catholic, Roman .. ..	565,029	568,973	1,134,002	577,997	583,458	1,161,455	27,453
Catholic, undefined .. ..	20,082	18,577	38,659	63,861	63,681	127,542	88,883
Church of Christ .. ..	24,680	29,894	54,574	28,820	33,934	62,754	8,180
Church of England .. ..	1,212,772	1,160,223	2,372,995	1,297,589	1,267,529	2,565,118	192,123
Congregational .. ..	31,931	39,582	71,513	30,411	31,791	62,202	- 9,311
Lutheran .. ..	31,627	25,892	57,519	32,569	28,234	60,803	3,284
Methodist .. ..	306,785	325,844	632,629	331,602	352,420	684,022	51,393
Presbyterian .. ..	322,072	314,902	636,974	356,743	356,486	713,229	76,255
Protestant, undefined .. ..	37,309	29,803	67,112	37,750	35,014	72,764	5,652
Salvation Army .. ..	14,584	17,005	31,589	14,297	16,913	31,210	- 379
Seventh Day Adventist .. ..	4,640	6,665	11,305	5,992	7,973	13,965	2,660
Other .. ..	16,508	16,162	32,670	19,605	22,241	41,846	9,176
Total Christian .. ..	2,649,644	2,617,997	5,267,641	2,859,826	2,867,912	5,727,738	460,097
Non-Christian—							
Buddhist .. ..	1,945	120	2,065	640	95	735	- 1,330
Chinese .. ..	3,512	79	3,591	298	7	305	- 3,286
Confucian .. ..	2,536	156	2,692	772	15	787	- 1,905
Hebrew .. ..	11,392	10,223	21,615	12,183	11,370	23,553	1,938
Mohammedan .. ..	2,647	221	2,868	1,668	209	1,877	- 991
Other .. ..	1,896	678	2,574	865	348	1,213	- 1,361
Total Non-Christian .. ..	23,928	11,477	35,405	16,426	12,044	28,470	- 6,935
Indefinite .. ..	13,096	6,790	19,886	8,133	4,896	13,029	- 6,857
No Religion .. ..	16,022	4,522	20,544	8,969	2,685	11,654	- 8,890
No Reply .. ..	60,180	32,078	92,258	473,757	375,191	848,948	756,690
Total .. ..	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

NOTE.—Minus sign (—) denotes decrease.

7. Birthplace.—At the 1933 Census the native-born element of the population represented 86.3 per cent. as compared with 84.5 per cent. at the 1921 Census, the number of native-born having increased by 25 per cent., while the immigrant population increased by 7 per cent. only.



Although the number born in the British Isles increased by 39,055 or 5.8 per cent., they were equivalent to only 10.7 per cent. of the total population as compared with 12.4 per cent. at the previous Census. Those born in other European countries increased by 24,155, or 34.0 per cent., and represented 1.4 per cent. of the total population of Australia as compared with 1.3 per cent. in the year 1921. The number of Asiatic birthplace decreased by 5,733, or 18.9 per cent., during the intercensal period, and was equivalent to only 0.4 per cent. of the total population as compared with 0.6 per cent. at the previous Census.

Of those not born in Australia, 57 per cent. were males and 43 per cent. females. Fifty-five per cent. of those born in the British Isles and 72 per cent. of those born in other European countries were males.

## POPULATION : BIRTHPLACES, AUSTRALIA, 1921 AND 1933.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Birthplace.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Australia .. ..	2,273,999	2,307,664	4,581,663	2,848,282	2,878,284	5,726,566	1,144,903
New Zealand .. ..	20,002	18,609	38,611	23,837	22,126	45,963	7,352
Other Australasian .. ..	315	209	524	468	306	774	250
Total Australasia .. ..	2,294,316	2,326,482	4,620,798	2,872,587	2,900,716	5,773,303	1,152,505
England .. ..	246,134	199,990	446,124	268,849	217,982	486,831	40,707
Wales .. ..	7,845	5,645	13,490	8,492	5,994	14,486	996
Scotland .. ..	60,419	48,337	108,756	73,488	59,001	132,489	23,733
Ireland .. ..	53,221	51,812	105,033	41,576	37,076	78,652	- 26,381
Germany .. ..	14,117	8,279	22,396	10,826	6,016	16,842	- 5,554
Greece .. ..	3,147	507	3,654	6,548	1,789	8,337	4,683
Italy .. ..	6,306	1,829	8,135	20,064	6,692	26,756	18,621
Other European .. ..	27,576	9,265	36,841	31,456	11,790	43,246	6,405
Total Europe .. ..	418,765	325,664	744,429	461,299	346,340	807,639	63,210
British India .. ..	4,976	1,942	6,918	4,544	2,230	6,774	- 144
China .. ..	14,859	365	15,224	8,072	507	8,579	- 6,645
Other Asiatic .. ..	6,541	1,609	8,150	6,690	2,516	9,206	1,056
Total Asia .. ..	26,376	3,916	30,292	19,306	5,253	24,559	- 5,733
Union of South Africa .. ..	2,784	2,624	5,408	3,271	2,908	6,179	771
Other African .. ..	806	561	1,367	926	716	1,642	275
Total Africa .. ..	3,590	3,185	6,775	4,197	3,624	7,821	1,046
Canada .. ..	2,378	1,172	3,550	2,621	1,299	3,920	370
United States of America .. ..	4,134	2,470	6,604	3,569	2,497	6,066	- 538
Other American .. ..	1,195	723	1,918	965	628	1,593	- 325
Total America .. ..	7,707	4,365	12,072	7,155	4,424	11,579	- 493
Polynesia .. ..	1,991	1,177	3,168	1,582	1,305	2,887	- 281
At Sea .. ..	1,872	1,836	3,708	985	1,066	2,051	- 1,657
Not Stated .. ..	8,253	6,239	14,492	(a)	(a)	(a)	..
Total .. ..	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

(a) 11,165 persons (5,769 males, 5,396 females), whose birthplace was not stated, were distributed after further analysis of other particulars on the Householders' Schedule.

NOTE.—Minus sign (—) denotes decrease.

8. Period of Residence in Australia.—The decline in immigration into Australia during recent years is reflected in the figures in this table. They show that, of residents not born in Australia who stated their period of residence, 6 per cent. had resided in Australia for a period of less than five years, and 25 per cent. for less than ten years, as compared with 11 per cent. and 35 per cent. respectively at the previous Census.

Fluctuations in immigration into Australia over a long period are also partially revealed by this table, which classifies the immigrant population of Australia according to the period of their residence in Australia. Those in the group 80-84 years represent the survivors in Australia of the arrivals during the gold rush of the 'fifties, while the heavy numbers in the 45-49 group are the survivors of those arriving during the boom period of the 'eighties. The particularly heavy immigration during the years 1911 to 1913 is reflected in the outstanding number in the 20-24 years group, followed by the slump during the war period of 1914 to 1919 in the number in the 15-19 years group, and the increasing immigration after that war in the 10-14 and 5-9 years groups. The great reduction in immigration brought about by the economic depression is the cause of the relatively small number in the 0-4 years group. The 10,190 persons shown as having a period of residence of under 1 year are mostly the passengers and crews of overseas vessels which were in Australian waters on the night of the Census.

**IMMIGRANT POPULATION: Period of Residence in Australia of Persons who were not born in Australia, 1921 and 1933.**

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Number of Completed Years of Residence.				Census 1921.			Census 1933.			Increase, 1921- 1933.
				Males.	Females.	Persons.	Males.	Females.	Persons.	
Years.										
0	..	..	..	28,386	19,827	48,213	7,407	2,783	10,190	- 38,023
1	..	..	..	8,375	16,998	25,373	2,133	1,856	3,989	- 21,384
2	..	..	..	2,026	2,490	4,516	2,243	2,277	4,520	4
3	..	..	..	1,715	1,404	3,119	5,683	5,411	11,094	7,975
4	..	..	..	2,779	2,623	5,402	10,761	9,121	19,882	14,480
0-4	..	..	..	43,281	43,342	86,623	28,227	21,448	49,675	- 36,948
5-9	..	..	..	111,895	87,723	199,618	104,664	68,661	173,325	- 26,293
10-14	..	..	..	58,919	31,883	90,802	66,084	56,685	122,769	31,967
15-19	..	..	..	15,077	7,818	22,895	26,987	26,098	53,085	30,190
20-24	..	..	..	18,875	8,990	27,865	113,060	77,714	190,774	162,909
25-29	..	..	..	16,873	10,721	27,594	23,203	10,938	34,141	6,547
30-34	..	..	..	47,206	32,273	79,479	16,473	8,331	24,804	- 54,675
35-39	..	..	..	56,144	38,272	94,416	11,187	6,304	17,491	- 76,925
40-44	..	..	..	31,843	20,851	52,694	22,110	17,196	39,306	- 13,388
45-49	..	..	..	16,616	11,776	28,392	36,670	28,297	64,967	36,575
50-54	..	..	..	10,954	9,649	20,603	27,147	20,486	47,633	27,030
55-59	..	..	..	13,077	12,912	25,989	11,412	9,432	20,844	- 5,145
60-64	..	..	..	10,372	11,671	22,043	5,739	5,427	11,166	- 10,877
65-69	..	..	..	11,378	13,594	24,972	3,751	4,424	8,175	- 16,797
70-74	..	..	..	2,875	3,669	6,544	2,937	3,673	6,610	66
75-79	..	..	..	716	935	1,651	2,672	4,050	6,722	5,071
80-84	..	..	..	510	693	1,212	1,246	1,926	3,172	1,960
85-89	..	..	..	78	124	202	113	167	280	78
90-94	..	..	..	16	15	31	26	44	70	39
95-99	..	..	..	1	..	1	3	5	8	7
100 and over	..	..	..	..	..	..	..	1	1	1
Not Stated	..	..	..	13,903	12,050	25,953	15,118	13,137	28,255	2,302
Total not born in Australia	..	..	..	480,618	358,961	839,579	518,829	384,444	903,273	63,694
Born in Australia	..	..	..	2,282,252	2,313,903	4,596,155	2,848,282	2,878,284	5,726,566	1,130,411
Total	..	..	..	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

NOTE.—Minus sign (—) denotes decrease.

9. **Nationality.**—The number of foreign nationals in Australia increased since the 1921 Census by 32 per cent.—males by 25 per cent. and females by 71 per cent.—as compared with an increase of 22 per cent. in the number of British nationality. There was little change, however, in the proportion of foreign nationals relative to the total population, 99.1 per cent. of the population being British subjects, as compared with 99.2 per cent. at the previous Census. The greatest increases numerically among the foreign nationals were—Italians, 12,755; Greek, 2,835; Yugoslav, 2,217; and Polish, 1,257; whilst those of Chinese nationality decreased by 6,007; Dutch by 702; Americans (U.S.) by 700; and Japanese by 555.

The number of persons in Australia who were born in countries outside the British Empire totalled 113,557, and of this number 60,259, or 54 per cent., were of foreign nationality at 30th June, 1933, the remainder being British subjects by naturalization.

The percentages of foreign nationals to the numbers born in the corresponding foreign birthplaces were as follows:—Japanese nationals, 92 per cent. of the Japanese-born; Chinese, 91 per cent.; Yugoslav, 71 per cent.; Greek, 68 per cent.; Italian, 66 per cent.; Russian, 42 per cent.; American, U.S., 42 per cent.; and German, 22 per cent.

#### POPULATION: NATIONALITY (i.e., ALLEGIANCE), AUSTRALIA, 1921 AND 1933.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Nationality.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
British.. ..	2,722,152	2,665,053	5,387,205	3,318,228	3,251,290	6,569,518	1,182,313
Foreign—							
American, U.S. ..	2,520	737	3,257	1,904	653	2,557	— 700
Chinese .. ..	13,614	185	13,799	7,615	177	7,792	— 6,007
Danish .. ..	956	260	1,216	1,046	233	1,279	63
Dutch .. ..	1,430	187	1,617	786	129	915	— 702
Estonian .. ..	(a)	(a)	(a)	515	323	838	(a) 838
Finnish .. ..	517	37	554	962	100	1,062	508
French .. ..	1,221	867	2,088	924	723	1,647	— 441
German .. ..	2,538	1,017	3,555	2,738	934	3,672	117
Greek .. ..	2,430	387	2,817	4,639	1,013	5,652	2,835
Italian .. ..	3,984	919	4,903	14,068	3,590	17,658	12,755
Japanese .. ..	2,489	150	2,639	1,937	147	2,084	— 555
Norwegian .. ..	960	65	1,025	1,150	88	1,238	213
Polish .. ..	351	149	500	1,008	749	1,757	1,257
Russian .. ..	1,655	662	2,317	1,283	772	2,055	— 262
Spanish .. ..	405	140	545	403	133	536	51
Swedish .. ..	1,399	80	1,479	1,274	96	1,370	— 109
Swiss .. ..	413	151	564	680	272	952	388
Yugoslav .. ..	502	107	609	2,503	323	2,826	2,217
Other .. ..	1,683	587	2,270	3,347	962	4,309	2,039
Total Foreign ..	39,067	6,687	45,754	48,842	11,417	60,259	14,505
Not Stated .. ..	1,651	1,124	2,775	41	21	62	— 2,713
Total .. ..	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

(a) Included with "Other" in 1921.

NOTE.—Minus sign (—) denotes decrease.

10. **Race.**—The people of Australia may be classified into two groups with respect to racial characteristics, namely, non-indigenous and indigenous. The former group comprises the European and other races who have migrated to Australia and their descendants born in Australia, while the latter group consists of the full-blood aboriginal natives of Australia whose estimated number at 30th June, 1941, were 47,620, but who are not included in the general population figures of Australia. The non-indigenous population of Australia is fundamentally British in race and nationality. The Australian people have the essential characteristics of their British ancestors, with perhaps some accentuation of the desire for freedom from restraint. The complete change of climatic



and social environment, the greater opportunity for an open-air life and the absence of the restricting conventions of older countries are exerting a noticeable influence upon the physical characteristics and social instincts of the people.

At 30th June, 1933, 99.2 per cent. of the population of Australia was stated to be of full-blood European race and 0.8 per cent. of non-European and half-caste, as compared with 99.1 per cent. and 0.9 per cent. respectively at the 1921 Census. The latter portion consisted of 22,780 full-blood non-Europeans, 20,620 half-caste aboriginals and 6,446 other half-castes. There were also 60,101 full-blood aboriginals who are not included in the general population figures.

During the intercensal period the number of full-blood non-Europeans decreased by 8,195 persons, or 26 per cent., the number of half-caste aboriginals increased by 9,084, or 74 per cent., and other half-castes increased by 366, or 6 per cent. The half-caste population was equivalent to 0.41 per cent. of the total population of Australia as compared with 0.32 per cent. in the year 1921.

### POPULATION : RACE, AUSTRALIA, 1921 AND 1933.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Race.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Full-blood— European .. ..	2,726,515	2,660,628	5,387,143	3,334,775	3,245,218	6,579,993	1,192,850
Non-European—							
Chinese .. ..	16,011	1,146	17,157	9,311	1,535	10,846	- 6,311
Cingalese .. ..	231	38	269	196	78	274	5
Filipino .. ..	319	103	422	214	78	292	- 130
Indian (a) .. ..	2,743	138	2,881	2,216	188	2,404	- 477
Japanese .. ..	2,546	194	2,740	2,007	234	2,241	- 499
Malay .. ..	986	101	1,087	813	156	969	- 118
Papuan .. ..	142	21	163	221	18	239	76
Polynesian .. ..	1,562	551	2,113	883	505	1,388	- 725
Syrian .. ..	1,584	1,308	2,892	1,553	1,327	2,880	- 12
Other .. ..	1,077	174	1,251	895	352	1,247	- 4
Total Non-European Full-blood .. ..	27,201	3,774	30,975	18,309	4,471	22,780	- 8,195
Half-caste—							
Australian Aboriginal ..	5,980	5,556	11,536	10,631	9,989	20,620	9,084
Chinese .. ..	1,891	1,778	3,669	1,901	1,602	3,503	- 166
Indian (a) .. ..	366	329	695	360	334	694	- 1
Japanese .. ..	97	91	188	116	109	225	37
Negro .. ..	108	72	180	110	89	208	28
Polynesian .. ..	184	165	349	218	216	434	85
Syrian .. ..	173	175	348	149	153	302	- 46
Other .. ..	355	296	651	533	547	1,080	429
Total Half-caste .. ..	9,154	8,462	17,616	14,027	13,039	27,066	9,450
Total .. ..	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

(a) Native of India.

NOTE.—Minus sign (—) denotes decrease.

11. Foreign Language.—On the occasion of the 1933 Census, persons who could not read and write English but could read and write some foreign language were asked to state that language. This question had never appeared on the Census Schedule before and there is some doubt whether the question was correctly understood, as it appears that some persons who were able to read and write English and a foreign language also may have replied to this question incorrectly.

The recorded figures indicate that at the 1933 Census, 29,738 persons, comprising 23,638 males and 6,100 females, stated they were not able to read and write English, but were able to read and write a foreign language. Of this number 39 per cent. were

able to read and write Italian; 17 per cent. Chinese; 10 per cent. Greek; 5 per cent. Yugoslav; 4 per cent. Japanese; and 4 per cent. German. Included in the total are 1,014 persons who were passengers, or members of the crews, of oversea vessels in Australian waters on Census night.

Forty-three per cent. of the Italian-born population of Australia stated that they were unable to read and write English but were able to read and write Italian. Similarly, 59 per cent. of the Chinese, 54 per cent. of the Japanese, 36 per cent. of the Yugoslav, 37 per cent. of the Greek, and 20 per cent. of the Maltese stated that they were unable to read and write English but could read and write a foreign language.

Particulars were not obtained concerning the number, if any, of foreign-born persons who could not read and write any language.

### IMMIGRANT POPULATION : FOREIGN LANGUAGE, AUSTRALIA, 1933.

PERSONS NOT ABLE TO READ AND WRITE ENGLISH, BUT ABLE TO READ AND WRITE A FOREIGN LANGUAGE.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Foreign Language.	Males.	Females.	Persons.
Albanian .. .. .	428	1	429
Arabic .. .. .	178	99	277
Bulgarian .. .. .	144	21	165
Chinese .. .. .	5,008	64	5,072
Croatian .. .. .	128	19	147
Czechoslovak .. .. .	76	12	88
Danish .. .. .	59	27	86
Estonian .. .. .	35	29	64
Filipino .. .. .	65	1	66
Finnish .. .. .	233	49	282
French .. .. .	105	130	235
German .. .. .	598	466	1,064
Greek .. .. .	2,185	906	3,091
Hebrew .. .. .	134	203	337
Hindu .. .. .	614	4	618
Italian .. .. .	8,630	2,901	11,531
Japanese .. .. .	1,142	76	1,218
Malay .. .. .	389	1	390
Maltese .. .. .	445	119	564
Norwegian .. .. .	124	5	129
Polish .. .. .	102	124	226
Russian .. .. .	278	302	580
Serbian .. .. .	74	6	80
Spanish .. .. .	277	93	370
Swedish .. .. .	143	20	163
Syrian .. .. .	93	67	160
Yugoslav .. .. .	1,158	263	1,421
Other .. .. .	793	92	885
Total .. .. .	23,638	6,100	29,738

12. Industry.—The following table shows the population of Australia classified according to the industry group in which they are usually engaged. The number of breadwinners in Australia at 30th June, 1933, was 3,155,621, of whom 2,367,780 were males and 787,841 females. The term "breadwinner" generally includes persons of all ages who are employers, working on own account, wage and salary earners,

unemployed persons, pensioners, and those of independent means. Pensioners included in this number totalled 286,091. Excluding pensioners, the breadwinners numbered 2,869,530, comprising 2,239,677 males and 629,853 females. Owing to the adoption of an improved classification since the 1921 Census, in accordance with the recommendations of the Conference of Empire Statisticians, there has been some difficulty in making a strictly accurate comparison between the numbers engaged in each group at the Censuses of 1921 and 1933. The main divergence is that relating to the proportion of breadwinners to total population. This is the result of the exclusion of pensioners from the industry groups under the new classification.

At the 1921 Census pensioners were classified to their previous industry, or to the dependent or independent groups, whichever was stated. At the 1933 Census, however, they were specifically directed to state if they were pensioners and they were classed accordingly. These facts need to be borne in mind in considering the recorded changes to which attention is called below.

The proportion of breadwinners (including all pensioners shown) in the male population increased from 68.1 per cent. at the 1921 Census to 70.3 per cent. at the 1933 Census, and female breadwinners from 17.5 per cent. to 24.1 per cent. If pensioners are excluded, the proportion of breadwinners at the 1933 Census was as follows:—Males, 66.5 per cent. and females 19.3 per cent. Comparable figures for the year 1921 are not available.

Since the 1921 Census the total of male breadwinners, including pensioners, increased by 25.8 per cent., and female breadwinners by 68.7 per cent. This increase in the number of female breadwinners is due in large measure to the increase in the stated number of old-age and invalid pensioners in 1933 as compared with the stated number in 1921. Excluding those who were not definitely stated to be associated with some occupation or industry, the number of breadwinners increased by 17.9 per cent.—males by 15.4 per cent. and females by 27.9 per cent.

At the 1933 Census, as also at the previous Census, the Industrial group (factories, construction works, etc.) was the predominant group of industries and included 32.1 per cent. of the breadwinners (excluding those not definitely associated with industry) in Australia in 1933 as compared with 31.4 per cent. at the 1921 Census. The number of persons engaged in industrial occupations throughout Australia exceeded those in all primary industries by 209,120, or 32 per cent., as compared with 22 per cent. at the previous Census. The proportion of breadwinners engaged in the Agricultural, Pastoral and Dairying industries decreased from 21.0 per cent. at the 1921 Census to 20.3 per cent. in the year 1933.

During the intercensal period the aggregate increase in the number of males employed in each industry group was greater than that for females, with the exception of Personal and Domestic Service, and the Public Administration and Professional groups. The proportion of females to the total number of persons engaged in the various occupational groups increased in the majority of groups, as follows:—Personal and Domestic Service from 76.2 per cent. in the year 1921 to 78.4 per cent. in the year 1933; Public Administration and Professional from 39.0 per cent. to 46.1 per cent.; Commerce and Finance from 21.8 per cent. to 24.9 per cent.; Entertainment, Sport and Recreation from 13.0 per cent. to 16.4 per cent.; Transport and Communication from 3.5 per cent. to 5.2 per cent.; and Agricultural, Pastoral, etc., from 2.1 per cent. to 3.6 per cent. In the Industrial group (factories, construction works, etc.), the number of persons engaged in the Building and Construction sections—where the proportion of females is low—increased more than in the Factory group with the result that the proportion of females in the group fell from 16.7 per cent. to 15.9 per cent. Considered separately, it will be seen that the proportion of females in the several sections scarcely altered since 1921 so that the smaller proportion of females in the group as a whole is due to the altered values of the component parts of the group. In all industry groups taken together the proportion of females to the total number of persons engaged increased from 19.9 to 21.6 per cent.



## POPULATION : NUMBER ENGAGED IN INDUSTRY, AUSTRALIA, 1921 AND 1933.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Industry Group.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Fishing and Trapping ..	10,671	81	10,752	14,570	41	14,611	3,859
Agricultural, Pastoral and Dairying ..	471,460	9,895	481,355	528,154	19,633	547,787	66,432
Forestry ..	30,191	89	30,280	26,019	114	26,133	4,147
Mining and Quarrying ..	66,524	242	66,766	68,327	193	68,520	1,754
Industrial—							
Manufacturing ..	326,847	118,727	445,574	375,434	136,077	511,511	65,937
Building ..	91,878	396	92,274	107,039	407	107,446	12,172
Other ..	176,183	775	176,958	245,919	1,295	247,214	70,256
Total Industrial ..	597,908	119,898	717,806	728,392	137,779	866,171	148,365
Transport and Communica- tion ..	200,523	7,214	207,737	212,161	11,732	223,893	16,156
Commerce and Finance ..	258,595	72,083	330,678	338,637	112,335	451,172	120,494
Public Administration and Professional ..	131,234	83,995	215,229	125,092	107,120	232,212	16,983
Entertainment, Sport and Recreation ..	15,517	2,313	17,830	20,278	3,972	24,250	6,420
Personal and Domestic Service ..	49,934	159,880	209,814	52,354	190,024	242,378	32,564
No Industry or Industry not stated ..	50,115	11,299	61,414	a 125,493	a 46,910	a 172,403	110,989
Pensioners ..	(b)	(b)	(b)	128,103	157,988	286,091	(b)
Total Breadwinners	1,882,672	466,989	2,349,661	2,367,780	787,841	3,155,621	805,960
Dependants ..	880,198	2,205,875	3,086,073	999,331	2,474,887	3,474,218	388,145
Total ..	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

(a) Includes unemployed persons for whom industry was not stated. (b) Comparable figure not available. Most pensioners in 1921 were recorded in the industry group to which they claimed to belong.

NOTE.—Minus sign (—) denotes decrease.

13. **Grade of Occupation.**—This table shows the population of Australia classified according to the capacity in which they are engaged in the various branches of industry. The number of employers at 30th June, 1933, was 207,680, an increase of 48.7 per cent. over the number stated at the 1921 Census, but actually 2 per cent. less than the number of employers at the earlier 1911 Census. Those persons who were stated to be working on own account showed an increase of 7.9 per cent. since the 1921 Census.

Of the population at 30th June, 1933, 1,589,271 males and 510,277 females were stated to be in the wage and salary earning group. On account of the economic depression in 1933, a number of boys and girls who would normally have been wage and salary earners had never been in work, and were omitted from this grade. If these be included the total wage and salary earning group in 1933 would be 1,647,671 males and 538,515 females representing 65.9 and 22.2 per cent. respectively of males and females aged 14 years and over, compared with 67.1 and 20.2 per cent. at the 1921 Census.

The proportion of females to the total number of persons in the wage-earning group increased from 22.6 per cent. in the year 1921 to 24.3 per cent. at the time of the 1933 Census.

Of the wage-earning group, 1,447,507 or 69.0 per cent. were in full-time employment at the date of the Census; 170,997 persons, or 8.1 per cent., were employed part-time (this number includes those who stated themselves to be on sustenance work or relief work); and 481,044, or 22.9 per cent., stated themselves to be unemployed.

## POPULATION : GRADE OF OCCUPATION, AUSTRALIA, 1921 AND 1933.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Grade.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Employer .. ..	129,142	10,481	139,623	186,849	20,831	207,680	68,057
Working on Own Account	290,291	46,030	342,321	318,951	50,424	369,375	27,054
Wage or Salary Earner				1,019,158	401,982	1,421,140	
Apprenticed Wage Earner .. ..	1,148,132	354,761	1,502,893	20,674	5,693	26,367	115,611
Wage Earner Em- ployed Part-time				144,170	26,827	170,997	
Unemployed .. ..	137,675	21,405	159,080	405,269	75,775	481,044	321,964
Helper not receiving Salary or Wages	31,620	3,172	34,792	40,754	5,262	46,016	11,224
Grade not applicable (a)	994,500	2,229,053	3,224,243	1,226,866	2,674,756	3,901,562	677,319
Not Stated .. ..	25,420	7,362	32,782	4,480	1,178	5,658	-27,124
Total .. ..	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

(a) Includes pensioners, persons of private means not in business, females engaged in home duties, scholars and other dependants. NOTE.—Minus sign (—) denotes decrease.

14. Unemployment.—The number of persons who stated they were wholly unemployed at 30th June, 1933, totalled 481,044, or 22.9 per cent. of the number of persons in the wage-earning group. Of those unemployed, 405,269 were males and 75,775 females, representing a percentage of unemployment of 25.5 for males and 14.8 for females respectively.

Corresponding percentage of unemployment from the 1921 Census results were males 10.7 per cent. and females 5.7 per cent. At the 1933 Census 15,061 males and 7,710 females who were unemployed and under 21 years of age stated they had never been in employment.

The percentage of males unemployed in Australia according to the Census returns (25.5 per cent.) was practically the same as the percentage of members of reporting Trade Unions in Australia who were unemployed (25.4), as shown by the returns supplied by the Unions to the Commonwealth Statistician for the second and third quarters of 1933.

Of the 481,044 persons unemployed, 453,487 stated the cause of their unemployment : 90.9 per cent. was due to scarcity of employment ; 5.6 per cent. to illness ; 1.1 per cent. to accident ; and 2.4 per cent. to all other causes. The proportion of wage-earners who were unemployed as the result of illness and accident had decreased since the 1921 Census from 2.7 per cent. to 1.4 per cent. for males, and from 2.6 per cent. to 1.7 per cent. for females.

## POPULATION : CAUSE OF UNEMPLOYMENT, AUSTRALIA, 1921 AND 1933.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Cause.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Scarcity of Employment ..	68,751	6,092	74,843	355,935	56,296	412,231	337,388
Illness .. ..	29,799	9,551	39,350	17,223	8,268	25,491	-13,859
Industrial Dispute .. ..	4,249	290	4,539	1,526	85	1,611	-2,928
Accident .. ..	4,556	246	4,802	4,484	391	4,875	73
Other Causes .. ..	24,069	4,061	(a)28,130	1,590	308	1,898	-26,232
Voluntarily (so described)	(b)	(b)	(b)	4,579	2,802	7,381	(b) 7,381
Not Stated .. ..	6,251	1,165	7,416	19,932	7,625	27,557	20,141
Total .. ..	137,675	21,405	159,080	405,269	75,775	481,044	321,964

(a) Many classified as "Other Causes" were due to "Scarcity of Employment". (b) Not shown separately in 1921. (c) Excludes wage earners stated to be employed part-time or on sustenance or relief work. NOTE.—Minus sign (—) denotes decrease.

Of those who stated the duration of their unemployment, 24.9 per cent. had been unemployed for less than 24 weeks; 14.1 per cent. between 24 weeks and 1 year; 13.9 per cent. between 1 and 2 years; 18.2 per cent. between 2 and 3 years; 18.9 per cent. between 3 and 4 years; and 10.0 per cent. for 4 years or longer. Sixty-four per cent. of the males unemployed and 43 per cent. of the females unemployed stated that a period of over one year had elapsed since they were last regularly employed.

# POPULATION: DURATION OF UNEMPLOYMENT, AUSTRALIA, 1921 AND 1933.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Duration of Unemployment.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Under 1 week .. ..	12,107	1,751	13,858	1,970	682	2,652	- 11,206
1 week .. ..	14,250	2,318	16,568	4,612	1,980	6,592	- 9,976
2 weeks .. ..	11,537	1,795	13,332	5,698	2,218	7,916	- 5,416
3 .. ..	9,477	1,424	10,901	5,035	1,917	6,952	- 3,949
4 weeks and under 8 weeks	20,967	3,289	24,256	16,637	5,382	22,019	- 2,237
8 .. ..	12,202	1,958	14,160	13,711	3,771	17,482	3,322
12 .. ..	10,662	1,698	12,360	17,815	4,542	22,357	9,997
16 .. ..				10,352	2,441	12,793	
20 .. ..				7,007	1,512	8,519	
24 .. ..				24,607	6,306	30,913	
28 .. ..				6,289	1,171	7,460	
32 .. ..				6,046	1,103	7,149	
36 .. ..				7,240	1,213	8,453	
40 .. ..				3,882	691	4,573	
44 .. ..				113	10	123	
48 .. ..				2,170	358	2,528	
Total under 1 year				133,184	35,297	168,481	
1 year and under 2 years				50,344	9,700	60,044	
2 years .. ..				69,848	8,667	78,515	
3 .. ..				75,895	5,669	81,564	
4 .. ..				40,607	2,616	43,223	
4 .. .. and over				35,391	13,826	49,217	
Not Stated .. ..	20,671	3,477	24,148				25,069
Total .. ..	137,675	21,405	159,080	405,269	75,775	481,044	321,964

(a) Excludes wage-earners stated to be employed part-time or on sustenance or relief work.

NOTE.—Minus sign (—) denotes decrease.

## § 10. Dwellings.

1. Number of Dwellings.—The great majority of the questions on the Census Schedule related to the individual members of the household, but other important questions referred to the dwellings in which the people were living at the date of the Census. From the replies to these questions much valuable information was tabulated concerning housing conditions. For census purposes a dwelling is the habitation of a family group, whether this comprises the whole of any building or only part thereof. Where two or more separate buildings in one place are used by a single family for dwelling purposes, the whole is regarded as one dwelling. On the other hand, where a building is subdivided into tenements or flats which are occupied as separate units, each unit is counted as a dwelling. A flat has been defined as a room or suite of rooms which was designed, or has been adapted, to be occupied as a separate domicile.

The Census definition of a dwelling includes private houses, tenements, flats, hotels, boarding-houses, hospitals, other institutions and any other structure used for the purpose of human habitation. Since the 1921 Census, the number of dwellings in Australia including those being built increased by 407,714, or 33.7 per cent., a much higher rate



of increase than that of 22.0 per cent. for the population during the same period. At the previous Census there was one private dwelling for every 4.9 persons in Australia but at 30th June, 1933, this ratio had increased to one dwelling for every 4.4 persons.

The following table represents a summary of the information relating to the number of dwellings in Australia at 30th June, 1933 :—

### DWELLINGS : AUSTRALIA, CENSUS, 30th JUNE, 1933.

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Division.	Occupied.	Unoccupied.	Being Built.	Total.	Percentage of Total Dwellings.
Urban—					%
Metropolitan .. ..	732,247	24,123	976	757,346	46.79
Provincial .. ..	257,259	10,105	474	267,838	16.55
Rural .. ..	557,870	34,544	902	593,316	36.66
Total .. ..	1,547,376	68,772	2,352	1,618,500	100.00

Details for each State and Territory are as follows :—

### DWELLINGS : STATES, CENSUS, 30th JUNE, 1933.

State or Territory.	Occupied.	Unoccupied.	Being Built.	Total.
New South Wales .. ..	599,750	28,737	746	629,233
Victoria .. ..	432,872	18,763	750	452,385
Queensland .. ..	216,122	9,311	301	225,734
South Australia .. ..	139,274	5,353	160	144,787
Western Australia .. ..	103,578	4,029	260	107,867
Tasmania .. ..	52,484	2,421	129	55,034
Northern Territory .. ..	1,301	55	1	1,357
Australian Capital Territory .. ..	1,995	103	5	2,103
Total .. ..	1,547,376	68,772	2,352	1,618,500

2. Class of Dwelling.—As previously indicated, the dwellings in which the people are housed comprise private houses, tenements, flats, hotels, boarding-houses, charitable institutions, etc. It is desirable when considering the question of housing to exclude those forms of accommodation which do not represent the normal housing conditions associated with family life, and the statistics which follow relate mainly to private dwellings only, i.e., private houses, tenements and flats.

At the 1933 Census 1,509,671, or 97.6 per cent. of the total occupied dwellings in Australia, were private dwellings, as compared with 1,107,010, or 96.0 per cent., at the previous Census. During the intercensal period the number of private dwellings in Australia increased by 402,661, or 36.4 per cent.; those in the metropolitan areas increased by 244,993, or 52.4 per cent.; the urban provincial by 41,804, or 20.1 per cent., and in the rural areas by 115,864, or 26.9 per cent.

## DWELLINGS : CLASS OF OCCUPIED DWELLING, AUSTRALIA, 1921 AND 1933.

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Class of Occupied Dwellings.	Number of Occupied Dwellings.									Increase, 1921-1933.
	Census, 4th April, 1921.				Census, 30th June, 1933.					
	Urban.		Rural.	Total Australia.	Urban.		Rural.	Total Australia.		
	Metro-politan.	Pro-vincial.			Metro-politan.	Pro-vincial.				
Private House ..	440,092	202,270	426,215	1,068,607	651,138	240,199	543,182	1,434,519	365,912	
Tenement or Flat ..	27,821	5,537	5,045	38,403	61,768	9,412	3,972	75,152	36,749	
Total Occupied Private Dwellings ..	467,913	207,807	431,290	1,107,010	712,906	249,611	547,154	1,509,671	402,661	
Caretaker's Quarters in Store, Office, etc. ..	864	298	462	1,624	1,326	483	651	2,460	836	
Hotel ..	1,925	2,330	3,711	7,966	1,683	1,853	3,062	6,598	1,368	
Boarding-house, Lodging House, Coffee Palace	18,354	4,837	4,474	27,665	14,092	3,606	3,234	20,932	6,733	
Educational Institution	400	325	309	1,034	479	303	359	1,141	107	
Religious Institution (non-educational) ..	97	59	66	222	52	13	30	95	127(a)	
Hospital ..	721	766	717	2,204	747	619	773	2,139	65(a)	
Charitable Institution (other than Hospital)	240	109	260	609	253	66	109	428	181(a)	
Penal Establishment ..	63	51	19	133	9	24	16	49	84(a)	
Military or Naval Establishment ..	48	63	220	331	19	16	10	45	286(a)	
Police Station or Barracks ..	207	386	882	1,475	200	300	1,011	1,520	45	
Fire Station ..	158	82	25	265	117	102	42	261	—	
Other (includes Club) ..	194	165	2,388	2,747	310	231	1,308	1,849	—710	
Not Stated ..					45	32	111	188		
Total Other Occupied Dwellings ..	23,271	9,471	13,533	46,275	19,341	7,648	10,716	37,705	8,570	
Total Occupied Dwellings ..	491,184	217,278	444,823	1,153,285	732,247	257,259	557,870	1,547,376	394,091	
Total Occupied Dwellings per square mile ..	492.26	59.68	0.15	0.39	579.99	82.99	0.19	0.52	0.13	
Wagon, Van, etc. (includes campers-out)	63	570	4,588	5,221	268	1,669	7,444	9,381	4,160	

(a) At the 1921 Census, detached buildings in some cases may have been counted separately, whereas in 1933 they have been counted together as one institution.

NOTE.—Minus sign (—) denotes decrease.

3. Number of Rooms.—For Census purposes, the kitchen and any enclosed sleep-out or portion of a verandah that was permanently enclosed were included in the number of rooms in the dwelling, but the bathroom, pantry and store were not included unless generally used for sleeping. The average number of rooms per private house in Australia at 30th June, 1933, was 5.03, and was slightly higher than that of 4.90 rooms at the previous Census. The average per private house in the metropolitan areas increased from 5.24 to 5.36 rooms; in the provincial sections the average scarcely altered, being 5.09 as compared with 5.11; and in the rural areas the average of 4.60 rooms per house was slightly lower than at the 1921 Census when the average was 4.67.

The average number of rooms for all tenements and flats was considerably less than that for private houses, and showed a substantial decline from 3.77 to 3.08 rooms, indicating a tendency towards even smaller flats. The reduction in the size of tenements and flats occurred throughout all divisions: the average for the metropolitan areas fell from 3.74 to 3.22 rooms and for the provincial sections from 3.87 to 2.52 rooms, with the heaviest decline of all in the rural areas from 3.85 to 2.24 rooms.

# **DWELLINGS : OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NUMBER OF ROOMS, AUSTRALIA, 1921 AND 1933.**

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Number of Rooms per Dwelling.(a)		Number of Occupied Private Dwellings.								Increase, 1921-1933.
		Census, 4th April, 1921.				Census, 30th June, 1933.				
		Urban.		Rural.	Total Aus- tralia.	Urban.		Rural.	Total Aus- tralia.	
		Metro- politan.	Pro- vincial.			Metro- politan.	Pro- vincial.			
1 ..	..	5,845	4,036	35,956	45,837	7,676	7,556	49,063	64,295	18,458
2 ..	..	8,897	5,489	26,772	41,158	16,005	8,142	33,440	57,587	16,429
3 ..	..	34,784	11,289	34,378	80,451	39,684	11,622	40,271	91,577	11,126
4 ..	..	112,254	49,565	102,397	264,216	148,457	52,362	122,579	323,398	59,182
5 ..	..	143,637	69,411	101,774	314,822	220,327	81,170	130,650	432,147	117,325
6 ..	..	89,968	39,172	65,293	194,433	165,017	52,846	89,408	307,271	112,838
7 ..	..	37,049	15,187	29,985	82,221	63,560	19,816	39,830	123,206	40,985
8 ..	..	17,311	6,607	14,600	38,518	24,776	7,416	17,356	49,548	11,030
9 ..	..	7,190	2,789	6,052	16,031	10,153	2,876	6,982	20,011	3,980
10 ..	..	3,932	1,530	3,517	8,979	4,706	1,463	3,859	10,028	1,049
11 ..	..	1,675	592	1,298	3,565	1,968	546	1,520	4,034	469
12 ..	..	1,208	391	1,248	2,847	1,463	382	1,419	3,264	417
13 ..	..	483	172	429	1,084	560	124	452	1,136	52
14 ..	..	469	136	532	1,137	499	140	588	1,227	90
15 ..	..	230	64	261	555	244	64	346	654	99
16 ..	..	151	37	223	411	144	45	236	425	14
17 ..	..	95	35	112	242	89	19	168	276	34
18 ..	..	62	16	91	169	51	24	122	197	28
19 ..	..	39	4	56	99	29	7	49	85	14
20 and over ..	..	199	54	308	561	131	32	352	515	46
Not Stated ..	..	2,435	1,231	6,008	9,674	7,367	2,959	8,464	18,790	9,116
Total Private Dwellings		467,913	207,807	431,290	1,107,010	712,906	249,611	547,154	1,509,671	402,661
Average Number of Rooms per Private Dwelling(a) ..		5.15	5.07	4.66	4.94	5.23	5.06	4.65	4.99	0.05

(a) Includes kitchen and enclosed sleep-out or portion of a verandah that has been permanently enclosed but does not include bathroom, pantry, store or outhouse, unless generally used for sleeping.

NOTE.—Minus sign (—) denotes decrease.

4. Nature of Occupancy.—At the 1921 Census the nature of occupancy of private houses was not tabulated separately from that of tenements and flats. At the 1933 Census, however, it was ascertained that 42.8 per cent. of the private houses in Australia for which particulars were supplied were occupied by owners; 13.5 per cent. by purchasers by instalments; 39.1 per cent. by tenants; and 4.6 per cent. by others.

In the metropolitan areas 51.4 per cent. of the occupants of private houses were owners or purchasers by instalments, as compared with 54.4 per cent. in the provincial areas, and 63.2 per cent. in the rural areas. In the latter areas, however, the ownership of the house is associated with the ownership of the land acquired as a means of livelihood.

More than 91 per cent. of the tenements and flats in Australia were occupied by tenants. The figures for all private dwellings, including tenements and flats, show that at the 1933 Census 53.8 per cent. of the dwellings were occupied by owners or were in process of purchase by instalments and 41.7 per cent. were occupied by tenants, as compared with 53.7 per cent. and 41.7 per cent. respectively at the 1921 Census, showing practically no alteration during the intercensal period.



**DWELLINGS : OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO  
THE NATURE OF OCCUPANCY, AUSTRALIA, 1921 AND 1933.**

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Nature of Occupancy.	Number of Occupied Private Dwellings.										
	Census, 4th April, 1921.					Census, 30th June, 1933.					Increase, 1921- 1933.
	Urban.		Rural.	Total Aus- tralia.	Urban.		Rural.	Total Aus- tralia.			
	Metro- politan.	Pro- vincial.			Metro- politan.	Pro- vincial.					
Owner .. .. .	133,729	81,008			227,026	441,763			218,539	100,421	
Purchaser by Instalments .. .. .	79,055	25,607	33,321	137,983	117,305	28,720	43,602	189,627	51,644		
Tenant .. .. .	241,567	91,031	117,082	449,680	360,393	108,359	146,660	615,412	165,732		
Caretaker .. .. .	6,036	6,025	37,514	49,575	6,410	5,022	29,331	40,763	16,310		
Other Methods of Oc- cupancy .. .. .											
Not Stated .. .. .	7,526	4,136	16,347	28,009	3,146	2,810	19,166	25,122	6,325		
					7,113	4,279	22,942	34,334			
Total .. .. .	467,913	207,807	431,290	1,107,010	712,906	249,611	547,154	1,509,671	402,661		

5. **Rent per Week.**—The information which has been tabulated concerning rents is restricted to the actual rent paid per week for unfurnished private dwellings occupied by tenants. For 15.5 per cent. of the private houses the rent was less than 10s. per week ; for 49.8 per cent., between 10s. and £1 per week ; for 27.4 per cent., between £1 and £1 10s. per week ; and for 7.3 per cent., over £1 10s. per week. Three-fourths of the houses with rents of less than 10s. per week were located outside the metropolitan areas.

The average rent was 17s. per week for unfurnished private houses throughout Australia. In the metropolitan areas the average was 19s. 7d. per week, in the provincial areas 15s. 9d., and in the rural areas 11s. 2d.

The average rent for unfurnished tenements and flats in the metropolitan areas was 23s. 6d. per week, or approximately 20 per cent. more than that paid for private houses in the same areas, notwithstanding that private houses in the metropolitan areas contain 50 per cent. more rooms than flats. In the provincial and rural areas, however, the rent of tenements and flats was approximately 15 per cent. and 11 per cent. respectively less than for private houses. For 16.9 per cent. of the tenements and flats a rent of less than 10s. per week was paid, and this percentage was slightly greater than for private houses ; the 33.8 per cent. between 10s. and £1 per week was only two-thirds the proportion of private houses in this group ; the percentage of 26.5 between £1 and £1 10s. per week was practically similar for private houses and flats ; but the 22.8 per cent. of tenements and flats with rent exceeding £1 10s. per week was three times the percentage of private houses in this rental group.

In the metropolitan areas 15 per cent. of the total private dwellings were tenements and flats, and the percentages of the total numbers of private dwellings in the several rental groups which consisted of tenements and flats were as follows—Under 10s. per week, 29 per cent. ; between 10s. and £1, 10 per cent. ; between £1 and £1 10s., 13 per cent. ; between £1 10s. and £2, 26 per cent. ; between £2 and £2 10s., 36 per cent. ; and in the over £2 10s. per week rental group 47 per cent. were tenements and flats.

A comparison of the average rents at the 1933 Census with those at the previous Census is possible for all private dwellings only and not for private houses separately from tenements and flats, which were not tabulated separately at the 1921 Census. The average rent of 17s. 6d. per week for all private dwellings comprising private houses, tenements and flats in Australia was 6 per cent. higher than that at the 1921 Census.

During the intercensal period particulars are collected regularly by the Commonwealth Statistician from house agents in certain cities and towns throughout Australia showing the rents as at the middle of each quarter. A comparison of these figures for the first quarter of 1921 with the second quarter of 1933 shows approximately the same change in average rents as was obtained from the Census figures. They also show that the peak period of high rents during the intercensal period occurred in the first quarter of 1928 when the average for the metropolitan areas of Australia was 21 per cent. higher than for 1921, but since that peak year the average fell by 20 per cent. to the 1933 figures.

**DWELLINGS: PRIVATE DWELLINGS OCCUPIED BY TENANTS CLASSIFIED  
ACCORDING TO THE RENT PER WEEK, AUSTRALIA, 1921 AND 1933.**

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Number of Occupied Private Dwellings.									
Rent per week Unfurnished.	Census, 4th April, 1921.				Census, 30th June, 1933.				Increase, 1921- 1933.
	Urban.		Rural.	Total Aus- tralia.	Urban.		Rural.	Total Aus- tralia.	
	Metro- politan.	Pro- vincial.			Metro- politan.	Pro- vincial.			
Under 5s. ..	1,067	3,317	18,304	22,688	1,663	2,837	14,869	19,369	- 3,319
5s. and under 10s. ..	12,786	19,885	37,957	70,628	20,333	13,865	32,083	66,281	- 4,347
10s. " " 15s. ..	56,331	31,158	29,830	117,319	71,755	30,618	33,435	135,808	18,489
15s. " " 20s. ..	56,581	16,535	10,189	83,305	86,365	25,196	16,036	127,587	44,282
20s. " " 25s. ..	40,486	9,104	5,683	55,273	74,460	16,806	9,173	100,439	45,166
25s. " " 30s. ..	25,373	3,709	1,546	30,628	39,777	6,310	2,860	48,947	18,319
30s. " " 35s. ..	14,305	1,884	1,061	17,250	21,403	2,827	1,051	25,281	8,031
35s. " " 40s. ..	5,900	441	207	6,548	8,274	712	180	9,166	2,618
40s. " " 50s. ..	6,589	570	469	7,628	7,992	505	170	8,667	1,039
50s. " " 60s. ..	2,726	179	126	3,031	2,642	95	55	2,792	- 239
60s. " " 70s. ..	1,556	123	85	1,764	1,488	57	21	1,566	- 198
70s. " " 80s. ..	570	24	26	629	593	10	5	608	- 21
80s. " " 90s. ..	503	35	34	572	445	5	2	452	- 120
90s. " " 100s. ..	210	11	3	224	189	6	..	195	- 29
100s. and over ..	580	14	29	623	482	7	4	493	- 130
Not Stated ..	15,995	4,042	11,533	31,570	22,532	8,513	36,716	67,761	36,191
Total Private Dwell- ings ..	241,567	91,031	117,082	449,680	360,393	108,359	146,660	615,412	165,732
Average Weekly Rent per Private Dwelling	20s. 8d.	14s. 0d.	9s. 11d.	16s. 6d.	20s. 2d.	15s. 7d.	11s. 2d.	17s. 6d.	18. 0d.

NOTE.—Minus sign (—) denotes decrease.

6. Private Houses of Three to Six Rooms.—A special inquiry was undertaken concerning private houses of three to six rooms with walls of wood, or of brick or stone, as a more satisfactory average of predominant rents paid by wage-earners can be obtained by restricting the analysis to this group, which as previously indicated comprised 78.1 per cent. of the private houses in Australia.

Since the 1921 Census the number of houses of three to six rooms in Australia had increased by 34 per cent. to a total of 1,108,594. Particulars as to rent were summarized for 440,560 houses of this number with walls of wood, brick or stone which were occupied by tenants: 46 per cent. had walls of brick or stone and 54 per cent. of wood. The distribution was the same as that of the previous Census and the proportions of rented houses with walls of wood, and of brick or stone, had not changed during the intercensal period.

At the 1933 Census there was a smaller proportion of rented houses of three and four rooms and an increased proportion of those of five and six rooms, for both wooden houses and brick houses. The relative increases for rented houses of three, four, five and

six rooms during the intercensal period were 2, 28, 43 and 60 per cent. respectively. In the metropolitan areas the proportional increase of houses of five and six rooms was even higher. The average rent of 18s. 5d. per week for all private houses, three to six rooms, of wood, brick or stone in the metropolitan areas at the 1933 Census was practically the same as at the previous Census.

In the provincial sections the average rent of 15s. 7d. per week was much higher than at the previous Census and the increase is found for all houses of three, four, five or six rooms, whether of wood, brick or stone. In the rural areas also the average rent of 11s. 6d. was much higher than that at the 1921 Census, and an increase is found in all types of houses included in this group.

An interesting comparison regarding the rent of private houses is that based on the average weekly rent per room. At the 1933 Census the average rent per room for wooden houses in the metropolitan areas of Australia was 3s. 5d. per week, and showed little alteration from the average of 3s. 6d. per week at the 1921 Census. Similarly, the average of 4s. 1d. per room for brick houses in the metropolitan areas was practically the same as at the previous Census.

In the urban provincial sections, however, the average rent of 3s. 1d. per room for wooden houses was higher than the 1921 Census figure of 2s. 8d. per week, and the rent of 3s. 6d. per week for brick houses was also higher in comparison with the previous figure of 3s. 1d. per week. The average rent per room in the rural areas also showed increases from 2s. 1d. to 2s. 6d. per week for wooden houses, and from 2s. 3d. to 2s. 7d. per week for those of brick. With the exception of brick houses in the metropolitan areas, the average rent per room for houses of three rooms was generally higher than for houses of four, five or six rooms. The increase since the 1921 Census in the rent per room was somewhat similar for all houses of three to six rooms in the provincial and rural sections of Australia.

**DWELLINGS : AVERAGE WEEKLY RENT PER ROOM OF PRIVATE HOUSES, THREE TO SIX ROOMS, WITH WALLS OF WOOD, BRICK OR STONE, OCCUPIED BY TENANTS, AUSTRALIA, 1921 AND 1933.**

(EXCLUDING TENEMENTS, FLATS, BOARDING-HOUSES, HOTELS, ETC., AND DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Average Weekly Rent per Room.										
Particulars.	Census, 4th April, 1921.				Census, 30th June, 1933.				Increase, 1921- 1933.	
	Urban.		Rural.	Total Aus- tralia.	Urban.		Rural.	Total Aus- tralia.		
	Metro- politan.	Pro- vincial.			Metro- politan.	Pro- vincial.				
	s. d.	s. d.			s. d.	s. d.				s. d.
Private Houses with Walls of—										
Wood—										
3 rooms .. ..	3 9	3 3	2 0	3 2	3 8	3 0	2 8	3 3	0 1	
4 " .. ..	3 7	2 9	2 2	2 10	3 7	3 4	2 7	3 2	0 4	
5 " .. ..	3 5	2 7	2 1	2 9	3 5	3 1	2 6	3 1	0 4	
6 " .. ..	3 5	2 6	2 0	2 7	3 4	2 11	2 3	2 11	0 4	
3 to 6 rooms ..	3 6	2 8	2 1	2 9	3 5	3 1	2 6	3 1	0 4	
Brick or Stone—										
3 rooms .. ..	4 0	3 5	2 4	3 10	4 0	3 9	2 6	3 11	0 1	
4 " .. ..	4 2	3 3	2 2	3 11	4 2	3 7	2 7	4 0	0 1	
5 " .. ..	4 2	3 1	2 3	3 10	4 1	3 6	2 8	3 11	0 1	
6 " .. ..	4 1	3 0	2 3	3 10	4 1	3 5	2 7	3 11	0 1	
3 to 6 rooms ..	4 2	3 1	2 3	3 10	4 1	3 6	2 7	3 11	0 1	
Wood, Brick or Stone—										
3 rooms .. ..	3 11	3 4	2 5	3 6	3 11	3 7	2 8	3 7	0 1	
4 " .. ..	3 11	2 11	2 2	3 3	3 11	3 4	2 7	3 6	0 3	
5 " .. ..	3 11	2 9	2 1	3 3	3 10	3 3	2 6	3 6	0 3	
6 " .. ..	3 11	2 8	2 0	3 3	3 10	3 1	2 4	3 5	0 2	
3 to 6 rooms ..	3 11	2 9	2 2	3 3	3 10	3 3	2 6	3 6	0 3	



## § 11. Oversea Migration.

1. Oversea Migration during Present Century.—Earlier issues of the Official Year Book contain in summary form tables showing the increase of population by net migration from 1861 to the latest date, while the Demography Bulletins issued by this Bureau give this information for the individual years. On pp. 278-9 of this chapter will be found a summary showing the increase by net migration to the population of the States from 1901 to 1940 in quinquennial groups and from 1935 to 1942 in single years. The following table shows for Australia the arrivals and departures as well as the net migration since 1901 :—

## OVERSEA MIGRATION : AUSTRALIA.

Period.	Arrivals.			Departures.			Net Migration.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
1901-05..	196,993	84,167	281,160	204,170	93,783	297,953	- 7,177	- 9,616	- 16,793
1906-10..	251,482	119,552	371,034	213,483	100,273	313,756	37,999	19,279	57,278
1911-15(a)	422,927	209,893	632,820	382,552	113,406	495,958	40,375	96,487	136,862
1916-20(a)	438,721	100,764	539,485	390,202	78,574	468,776	48,519	22,190	70,709
1921-25..	289,695	188,357	478,052	172,236	122,550	294,786	117,459	65,807	183,266
1926-30..	266,593	203,887	470,480	193,336	147,437	340,773	73,257	56,450	129,707
1931-35..	124,207	115,116	239,323	134,883	115,326	250,209	-10,676	- 210	- 10,886
1936-40(b)	161,774	159,538	321,312	140,901	137,283	278,184	20,873	22,255	43,128
1935 ..	27,676	27,740	55,416	28,182	27,523	55,705	- 506	217	- 289
1936 ..	29,726	30,168	59,894	29,045	29,352	58,397	681	816	1,497
1937 ..	35,123	34,679	69,802	32,161	32,438	64,599	2,962	2,241	5,203
1938 ..	39,910	38,018	77,928	34,206	34,585	68,791	5,704	3,433	9,137
1939(b) ..	37,719	37,366	75,085	31,491	29,703	61,194	6,228	7,663	13,891
1940(b) ..	19,296	19,307	38,603	13,998	11,205	25,203	5,298	8,102	13,400
1941(b) ..	11,861	10,800	22,661	10,063	7,414	17,477	1,798	3,386	5,184
1942(b) ..	6,295	5,971	12,266	3,059	3,041	6,100	3,236	2,930	6,166

(a) Includes movements of defence forces.

(b) Excludes movements of defence forces.

NOTE.—Minus sign (-) indicates an excess of departures over arrivals.

The net migration has varied greatly during the foregoing periods, reaching a maximum in the five years 1921-25. The War of 1914-19, during which 331,781 members of the Australian Imperial Forces embarked for service overseas, was responsible for a very large increase in the departures during the years 1914 to 1918. Immigration increased rapidly from 1910 to 1912, the gain during the latter year being the greatest in any one year in the present century (with the exception of 1919, when the troops were returning to Australia).

Although the quinquennium 1926-30 as a whole resulted in the considerable gain of 129,707 persons, the figures for the individual years reveal the decline in immigration which set in after 1927 and which resulted in an actual loss of population in 1930, 1931, 1932 and 1935.

The influence of the Commonwealth immigration policy is clearly reflected in the figures above. The average annual number of nominated and selected immigrants arriving in Australia during the periods specified was as follows :—

**IMMIGRATION : NUMBER OF NOMINATED AND SELECTED PERSONS.**

Period.	Average Annual Number.	Year.	Recorded Number.
1901-05 .. ..	Not available	1933 .. ..	72
1906-10 .. ..	7,945	1934 .. ..	159
1911-15 .. ..	30,111	1935 .. ..	100
1916-20 .. ..	2,326	1936 .. ..	9
1921-25 .. ..	23,090	1937 .. ..	141
1926-30 .. ..	19,881	1938 .. ..	852
1931-35 .. ..	156	1939 .. ..	2,686
1936-40 .. ..	766	1940 .. ..	140

The number of nominated and selected immigrants reached its peak in 1926, when 31,260 arrivals were recorded. Immigration has ceased since 1940.

2. **Country of Embarkation and Destination.**—The countries from which the migrants arrived or to which they departed are shown for the year 1940 in Demography Bulletin No. 58. Annual averages for the period 1925-29 appear in Official Year Book No. 25.

3. **Nationality or Race.**—The majority of migrants to and from Australia are of British nationality, while only a small proportion are of non-European race.

The numbers of arrivals and departures of migrants during the decade 1931 to 1940 and the year 1942 classified according to nationality or race are shown in the next table :—

**NATIONALITY OR RACE OF ARRIVALS AND DEPARTURES : AUSTRALIA.**

Nationality or Race.	Arrivals.			Departures.		
	1931-35.	1936-40.	1942.	1931-35.	1936-40.	1942.
American, U.S. ..	5,065	10,671	481	5,119	10,179	570
British .. ..	200,159	254,803	9,369	210,549	240,138	4,724
French .. ..	3,090	2,597	204	3,003	2,595	107
German .. ..	1,446	9,514	38	1,294	2,212	3
Greek .. ..	1,435	4,399	12	1,629	921	1
Italian .. ..	7,234	10,520	4	5,711	2,870	..
Yugoslav .. ..	1,203	2,588	1	1,242	988	3
Other European ..	4,432	12,491	946	4,863	5,452	562
Total European ..	224,064	307,583	11,055	233,410	265,355	5,970
Chinese .. ..	8,709	7,804	1,043	9,972	7,633	24
Japanese .. ..	1,625	1,710	2	2,050	1,730	32
Indian and Cingalese	2,007	2,387	7	1,775	2,258	11
Other Non-European	2,918	1,828	159	3,002	1,202	63
Total Non-European	15,259	13,729	1,211	16,799	12,829	130
Tot .. ..	239,323	321,312	12,266	250,209	278,184	6,100

During the period 1926-30 there was a considerable influx of Italian, Greek and Yugoslav settlers, so that although there was also much concurrent emigration of these nationals they provided a large permanent addition to the population of Australia. In the following quinquennium 1931-35, there was a considerably reduced increment to the Italian population by migration, whilst there was actually an excess of departures of most other nationals. The last five years, however, saw a resumption of immigration of Southern Europeans, while refugees were responsible for the heavy increase in net immigration of German nationals. Usually there is an excess of departures of non-European people as a whole though it is not true of all non-European nationals. The net gain or loss according to nationality or race for the two quinquennia from 1931 to 1940, and for the year 1942 and the percentage of each nationality on the total gain or loss are given in the following table :—

**NET GAIN OR LOSS : NATIONALITY OR RACE, AUSTRALIA.**

Nationality or Race.	Net Gain or Loss.			Proportion of Net Gain or Loss.		
	1931-35.	1936-40.	1942.	1931-35.	1936-40.	1942.
				Per cent.	Per cent.	Per cent.
American, U.S. ..	— 54	492	— 89	— 0.50	1.14	— 1.44
British ..	— 10,390	14,665	4,645	— 95.44	34.00	75.33
French ..	87	2	97	0.80	0.00	1.57
German ..	152	7,302	35	1.40	16.93	0.57
Greek ..	— 194	3,478	11	— 1.78	8.07	0.18
Italian ..	1,523	7,650	4	13.99	17.74	0.06
Yugoslav ..	— 39	1,600	— 2	— 0.36	3.71	— 0.03
Other European ..	— 431	7,039	384	— 3.96	16.32	6.23
<b>Total European ..</b>	<b>— 9,346</b>	<b>42,228</b>	<b>5,085</b>	<b>— 85.85</b>	<b>97.91</b>	<b>82.47</b>
Chinese ..	— 1,263	171	1,019	— 11.61	0.40	16.52
Japanese ..	— 425	26	30	— 3.90	0.06	— 0.49
Indian and Cingalese	232	129	4	2.13	0.30	— 0.06
Other Non-European	— 84	626	96	— 0.77	1.45	1.56
<b>Total Non-European</b>	<b>— 1,540</b>	<b>900</b>	<b>1,081</b>	<b>— 14.15</b>	<b>2.09</b>	<b>17.53</b>
<b>Total ..</b>	<b>— 10,886</b>	<b>43,128</b>	<b>6,166</b>	<b>— 100.00</b>	<b>100.00</b>	<b>100.00</b>

Owing to the depressed conditions in Australia the gain by migration decreased rapidly during the years 1928 and 1929 and there were actual losses of population during the next three years. There was little variation in the figures for arrivals and departures from 1933 to 1936, but in 1938 the arrivals exceeded the departures by 9,137 and in 1939 the excess was 13,891, the greatest gain to the population by migration since 1928. The excess of arrivals over departures in 1940 was 13,400, but with the outbreak of war in the Pacific area, the figure fell to 5,184 for 1941 and 6,166 for 1942.

Over 81 per cent. of the net migration in 1926-30 consisted of persons of British nationality and the remaining 19 per cent. were other Europeans. In the quinquennium, 1931-35, there was a loss by migration of persons of British nationality and a gain of those of Italian nationality. Non-Europeans, with the exception of Indians and Cingalese, also showed an excess of departures. During 1936-40 British migrants once more showed a gain. Migrants of all other nationalities except Japanese also showed a gain and the British migrants contributed only 34 per cent. of the total net gain. In 1942 British migrants (including evacuees) showed the greatest gain.



4. **Classes of Arrivals and Departures.**—Since 1st July, 1924, the arrivals and departures have been classified according to the declared intention of the migrant in regard to intended residence. The figures for the quinquennial periods 1926–30, 1931–35 and 1936–40 and for the years 1941 and 1942 are as follows:—

**MIGRANTS CLASSIFIED ACCORDING TO INTENDED RESIDENCE: AUSTRALIA.**

Classification.	1926–30.	1931–35.	1936–40.	1941.	1942
Permanent new arrivals ..	224,010	54,444	84,169	6,670	2,007
Australian residents returning from abroad ..	121,395	84,554	104,870	3,375	1,027
Temporary visitors ..	125,029	100,325	132,273	(a) 12,616	(a) 9,232
Not Stated .. ..	46	..	..	..	..
<b>Total Arrivals ..</b>	<b>470,480</b>	<b>239,323</b>	<b>321,312</b>	<b>22,661</b>	<b>12,266</b>
Australian residents departing permanently ..	103,209	71,670	51,006	3,804	1,609
Departing temporarily ..	111,714	79,426	94,650	2,572	522
Temporary visitors ..	125,772	99,108	132,528	11,101	3,969
Not Stated .. ..	78	5	..	..	..
<b>Total Departures ..</b>	<b>340,773</b>	<b>250,209</b>	<b>278,184</b>	<b>17,477</b>	<b>6,100</b>

(a) Includes British evacuees.

Although permanent new arrivals increased during each of the eight years prior to 1939 the number in the latter year was considerably below the annual average for the quinquennium 1926–1930 while the war caused a large drop in the number from 1940. Permanent departures were far more numerous in the years 1928 to 1931 than in earlier years but they declined during each of the six years ended 1937, the number in the latter year being the lowest yet recorded. Up to and including 1929 there was a considerable gain of permanent residents, but during 1930 and 1931 there was a heavy loss. The loss was very much reduced in 1932, 1933 and 1934, whilst during the past six years there was small gain in permanent residents.

The figures in the table above are based on the information supplied by travellers at the time of arrival or departure. For various reasons the intentions of travellers are subject to subsequent modification, and the figures quoted in the table must therefore be accepted as a record of intention only.

## § 12. Immigration.

### (A) Assisted Migration into Australia.

1. **Joint Commonwealth and States' Scheme.**—In 1920 an arrangement was arrived at between the Commonwealth and State Governments whereby the Commonwealth Government became responsible for the selection and medical inspection of migrants, and for their transport to Australia. The State Governments advised the Commonwealth from time to time as to the numbers and classes of migrants they were prepared to receive, and became responsible for their subsequent settlement. In addition, personal and group nominations were accepted by the States, the nominators undertaking responsibility for their settlement and aftercare.

In 1930 owing to the financial and industrial depression it was decided to confine the grant of assisted passages to the wives and dependent children of men who arrived in Australia prior to 1st January, 1930.

On 4th March, 1938, the Commonwealth Government decided, in co-operation with the Government of the United Kingdom, to resume assisted migration, and provision was made for the grant of assisted passages from the United Kingdom in favour of—

- (a) persons (relatives and friends) resident in the United Kingdom nominated by individuals or approved organizations;
- (b) migrants specially requisitioned for by any State; and
- (c) persons of British stock resident in the United Kingdom, who would be in possession of—
  - (1) in the case of a married man, not less than £300 capital on arrival in Australia, or alternatively, a pension or other income of not less than £100 per annum;
  - (2) in the case of a single man not less than £50 capital on arrival.

It was also decided that the Commonwealth Government would co-operate with any State to the extent that the migration policy of that State coincided with the policy of the Commonwealth, provided that the Commonwealth would itself deal with nominations which did not fall within the ambit of the policy of any particular State, but which were acceptable under the Commonwealth policy.

2. Number of Persons Assisted.—The number of assisted migrants for the years 1931 to 1940 inclusive, and the total from the earliest years up to the end of 1940 (when immigration ceased) are given in the following table:—

IMMIGRATION : NUMBER OF PERSONS ASSISTED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
1931 .. ..	76	45	43	6	99	5	1	275
1932 .. ..	21	3	23	..	123	5	..	175
1933 .. ..	11	3	1	1	50	..	..	72
1934 .. ..	11	4	1	..	143	..	..	159
1935 .. ..	1	..	1	..	98	..	..	100
1936 .. ..	4	2	1	..	2	..	..	9
1937 .. ..	60	33	6	3	39	..	..	141
1938 .. ..	410	179	19	43	161	38	2	852
1939 .. ..	1,309	544	376	126	304	24	3	2,686
1940 .. ..	92	20	16	4	5	3	..	140
Total from earliest years to end of 1940 .. ..	347,705	256,090	236,413	115,994	87,015	25,022	72	1,068,311

3. Suspension of Assisted Passage Scheme during War.—After the outbreak of hostilities it was decided to discontinue the grant of assisted passages for the duration of the war. Resumption of assisted migration after the war is a matter upon which the Inter-Departmental Committee appointed by Commonwealth Government to advise on post-war immigration will report.

## (B) The Regulation of Immigration into Australia.

1. Powers and Legislation of the Commonwealth.—(i) *Constitutional.* Under Section 51, xxvii. and xxviii. of the Commonwealth Constitution, the Parliament of the Commonwealth is empowered to make laws with respect to immigration and emigration and the influx of criminals.

(ii) *Legislation.* A summary of the provisions of the Immigration Act 1901–1925 and the Contract Immigrants Act 1905 (except the provisions of the Amending Immigration Acts of 1920, 1924 and 1925, which will be found in Official Year Book No. 21, p. 927), containing particulars regarding the admission of immigrants, prohibited immigrants, the liabilities of shipmasters and others, and kindred matters will be found in preceding issues of the Official Year Book (see No. 12, pp. 1166–8).

The Immigration Act 1930.—Under this Act it is provided that Section 5, subsection (1) of the Immigration Act 1901–1925 applies to any person who, since the commencement of the Immigration Restriction Act 1901, evaded an officer when entering

Australia, or gained admission or re-admission by fraudulent means. Steps can be taken to deal with such persons as prohibited immigrants at any time after they have landed in Australia.

The Immigration Act 1932.—This Act provides (a) that any alien who fails to satisfy an officer that he holds a landing permit, or that his admission has been authorized, may be prohibited from landing; (b) for the increase of the period during which a person may be declared a prohibited immigrant from three to five years; (c) that a person not a British subject and who has been convicted of a crime of violence against the person may be deported pursuant to an order of the Minister without his being subjected to a dictation test; (d) for the deportation of a person who has been convicted of a criminal offence or who has become an inmate of an insane asylum or public charitable institution within five years from the date of arrival instead of three years as hitherto; and (e) that where the wife of a person whom it is proposed to deport so desires, her name and the names of her dependent children may be included in her husband's deportation order. This would of course apply only to wives and children who were themselves immigrants.

The Immigration Act 1933.—This Act provides that Section 8A, as amended by the Immigration Act 1932—see (d) above—shall apply to persons who arrived in Australia since the commencement of the Section, i.e., since 2nd December, 1920. It also makes statutory provision for the taking of securities for compliance with the provisions of the Act.

The Immigration Act 1935.—The main purpose of this Act was to add a penalty clause to Section 5 of the principal Act, to overcome a legal difficulty which had arisen in regard to relying on Section 7 for the imposition of penalties on persons convicted under Section 5 on charges of being prohibited immigrants offending against the Act.

The Immigration Act 1940.—This Act provides (a) that the holder of a landing permit shall on demand satisfy an officer that he is able to comply with the conditions specified in the permit; (b) for the issue of, and extensions of, certificates of exemption; (c) that a non-British person who is convicted of a crime of violence against the person or of extorting any money or thing by force or threat, or of any attempt to commit such a crime or who is convicted of any other criminal offence for which he is sentenced to imprisonment for one year or longer may be deported; (d) for the exercise of discretion by the Minister in enforcing an order for the deportation of a person; and (e) for the provision and enforcement of maintenance guarantees in relation to persons seeking to enter Australia.

2. **Conditions of Immigration into Australia.**—(i) *Immigration of Non-European or Coloured Persons.* In pursuance of the established policy, the general practice is not to permit Asiatics or other coloured immigrants to enter Australia for the purpose of settling permanently.

There are special arrangements with India, Japan and China under which facilities are afforded for subjects of those countries who are bona fide merchants, students, or tourists to enter and remain in Australia under exemption whilst they retain their status.

(ii) *Immigration of White Aliens.* Aliens seeking to enter Australia for permanent residence are required to obtain landing permits or special authority for admission from the Department of the Interior.

Following the outbreak of war, alien immigration into Australia was severely restricted, and at present the admission of aliens from European countries has been virtually suspended.

Resumption of immigration to Australia in the post-war period is being considered by the Commonwealth Government.

(iii) *General Information.* General information as to conditions of entry into Australia may be obtained from the following offices:—

- (a) In Australia: The Secretary, Department of the Interior, Canberra, A.C.T.,
- (b) In Great Britain: The Official Secretary, High Commissioner's Office, Australia House, Strand, London, (c) In the United States of America: The Secretary, Australian Legation, Washington, D.C., (d) In Canada: The High Commissioner for Australia, Ottawa.



3. **Persons Admitted Without Dictation Test.**—The following table shows the number and nationality of persons admitted during 1941 and 1942 without passing the dictation test. Persons who are permitted to land pending transhipment to another country are excluded.

**PERSONS ADMITTED WITHOUT DICTATION TEST : NATIONALITIES,  
AUSTRALIA, 1941 AND 1942.**

Nationality or Race.	1941.	1942.	Nationality or Race.	1941.	1942.
Albanian .. ..	1	..	Swiss .. ..	72	40
American, U.S. ..	771	481	Turkish .. ..	2	1
American Negro ..	1	3	Yugoslav .. ..	8	1
Belgian .. ..	32	17	Other Whites ..	31	17
British .. ..	18,736	9,369			
Bulgarian .. ..	1	..	ASIATIC—		
Czechoslovak ..	29	15	Chinese .. ..	639	1,804
Danish .. ..	77	41	Indian and Cingalese	61	108
Dutch .. ..	665	701	Japanese .. ..	85	..
Estonian .. ..	2	..	Javanese .. ..	17	1,145
Finnish .. ..	8	6	Koepanger .. ..	95	..
French .. ..	288	204	Malay .. ..	8	173
German .. ..	145	38	Palestinian .. ..	37	..
Greek .. ..	13	12	Syrian .. ..	3	..
Hungarian .. ..	10	2	Timorese .. ..	..	48
Italian .. ..	9	4			
Latvian .. ..	3	5	OTHER—		
Lithuanian .. ..	12	..	Pacific and South Sea		
Norwegian .. ..	20	18	Islanders .. ..	24	34
Polish .. ..	160	28	Papuan and New		
Portuguese .. ..	5	1	Guinea Natives ..	11	84
Roumanian .. ..	30	1	Other and Unspecified	36	97
Russian .. ..	70	39			
Spanish .. ..	5	3			
Swedish .. ..	17	11	Total .. ..	22,239	14,551

4. **Departures of Persons of Non-European Races.**—The following figures in common with the other statistics in this sub-section have been compiled by the Department of the Interior and exclude transhipments. They are not therefore in agreement with departures, compiled in this Bureau and published elsewhere, which include transhipments. The number of persons of non-European race who left Australia during 1941 and 1942 were 1,186 and 1,270 respectively, distributed among the various nationalities as follows (1941 figures shown in parenthesis):—American Negroes, 3 (nil); Chinese 423 (617); Filipinos, nil (11); Natives of India and Ceylon, 21 (93); Japanese, nil (416); Javanese, 478 (12); Malays, 28 (8); Pacific and South Sea Islanders, 52 (5); Papuans and New Guinea Natives, 52 (10); Timorese, 42 (nil); other coloured, 171 (14).

### (C) Passports.

Provision is made in the Immigration Act 1901–1940 for the production of passports by all persons over 16 years of age who desire to enter Australia. Under the Passports Act 1920, it was compulsory also for all persons over 16 years of age to be in possession of a passport or other document authorizing his departure. This Act has now been superseded by the Passports Act 1938, which repealed the compulsory provisions and is now simply a machinery measure governing the issue of passports and the grant of other passport facilities. The Act extends to the Territories of Australia, including Papua, Norfolk Island and the Mandated Territory of New Guinea.

Although it is no longer compulsory to be in possession of a passport when leaving Australia, it is very desirable in their own interests that Australians proceeding abroad should provide themselves with a passport as a means of establishing their identity and nationality. The possession of a passport is necessary for admission into most countries overseas, and the holder of an Australian passport also has no difficulty in landing on return to Australia. The charge for an Australian passport is £1 ; for an ordinary visa 8s. and for a transit visa, 2s.

### § 13. Naturalization.

1. **Commonwealth Legislation.**—Naturalization in Australia is governed by the Nationality Act 1920–1936. The qualifications necessary for naturalization are :—  
(a) Residence in Australia continuously for not less than one year immediately preceding application for naturalization and previous residence either in Australia or in some other part of His Majesty's dominions for a period of four years within the last eight years before the application ; (b) good character and an adequate knowledge of the English language ; and (c) intention to settle in the British Empire.

The amending Act of 1930 provided for the charge of a prescribed fee for a Certificate of Naturalization. The fee is £5, except in the case of a certificate granted to a woman who was a British subject prior to her marriage to an alien, in which case the amount is 5s. An applicant who served with a good record in the Commonwealth Naval or Military Forces during the War of 1914–19 or in the Defence Forces in the present war (other than in an employment company) is exempt from payment of any fee. In the case of indigent persons the Minister may reduce the fee payable for a Certificate of Naturalization to 10s.

The amending Act of 1936 provided for certain alterations in the law dealing with the national status of married women, and vested in the Minister for the Interior certain powers and functions hitherto exercised by the Governor-General.

The amending Act, which came into operation on 1st April, 1937, provided for the following exceptions of the general principle that the wife of a British subject shall be deemed to be a British subject, and the wife of an alien deemed to be an alien :—

- (a) a woman who was a British subject prior to her marriage to an alien does not cease to be a British subject unless by reason of her marriage she acquires her husband's nationality ;
- (b) if a man, during the continuance of his marriage, ceases to be a British subject his wife does not lose her British nationality unless she acquires her husband's new nationality ;
- (c) if a man, during the continuance of his marriage ceases to be a British subject and his wife acquires his new nationality she may within one year from the date on which she acquired her husband's new nationality, or within such further time as the Minister in special circumstances allows, make a declaration that she desires to retain her British nationality ;
- (d) if after 31st March, 1937, a certificate of naturalization is granted to an alien, his wife, if she is not already a British subject, shall not be deemed to be a British subject, unless within one year from the date of such certificate, or within such further time as the Minister in special circumstances allows, she makes a declaration that she desires to acquire British nationality.
- (e) where an alien is a subject of a State at war with His Majesty, his wife, if she was a natural-born British subject, may upon making a declaration that she desires to resume British nationality be granted a certificate of naturalization.

Provision was also made in the amending Act whereby a woman who was a British subject prior to her marriage and who acquired her husband's nationality may make a declaration that she desires to retain while in Australia or in a Territory to which the Act applies the rights, powers and privileges of a British subject.

A summary of the main provisions of the principal Act appears in Official Year Book No. 22, pp. 934–5.

2. **Certificates Granted.**—(i) *Australia.* Particulars regarding the previous nationalities of the recipients of certificates of naturalization issued under the Act during the year 1942, and the countries from which such recipients had come, are given in the following table :—

**NATURALIZATION : CERTIFICATES GRANTED, 1942.**

Previous Nationalities of Recipients.				Countries from which Recipients of Commonwealth Certificates had come.			
Nationality.	Certificates Granted.	Nationality.	Certificates Granted.	Country.	Certificates Granted.	Country.	Certificates Granted.
Albanian ..	10	Italian ..	101	Albania ..	9	Netherlands E. Indies ..	10
American, U.S. ..	24	Japanese ..	3	America, U.S. ..	44	New Caledonia ..	8
Argentinian ..	1	Latvian ..	7	Belgium ..	10	New Zealand ..	10
Belgian ..	6	Lebanese ..	22	Bulgaria ..	1	Norway ..	27
Brazilian ..	1	Lithuanian ..	6	Canada ..	4	Palestine ..	33
Bulgarian ..	1	Norwegian ..	43	China ..	18	Poland ..	72
Chilean ..	2	Palestinian ..	24	Czechoslovakia ..	9	South Africa ..	13
Chinese ..	1	Polish ..	126	Denmark ..	35	South America ..	5
Czechoslovak ..	16	Roumanian ..	3	Egypt ..	39	Spain ..	13
Danish ..	57	Russian ..	50	Estonia ..	15	Sweden ..	27
Dutch ..	30	Spanish ..	15	Finland ..	5	Switzerland ..	20
Egyptian ..	1	Swedish ..	48	France ..	39	Syria ..	29
Estonian ..	28	Swiss ..	33	Germany ..	22	Tahiti ..	1
Finnish ..	22	Syrian ..	14	Great Britain ..	112	U.S.S.R. (Russia) ..	15
French ..	24	Turkish ..	6	Greece ..	94	Yugoslavia ..	33
German ..	65	Yugoslav ..	41	Holland ..	12	Others ..	157
Greek ..	126	Stateless ..	18	Italy ..	26		
Honduranian ..	1			Japan ..	3		
Hungarian ..	4			Latvia ..	2		
Iranian ..	1			Lithuania ..	5		
		Total ..	981	Malaya ..	4	Total ..	981

(ii) *States.* The certificates of naturalization granted in 1942 were issued in the various States and Territories as follows :—New South Wales, 387; Victoria, 379; Queensland, 95; South Australia, 42; Western Australia, 71; Tasmania, 3; Northern Territory, 1; and Australian Capital Territory, 3; Total, 981.

### § 14. Population of Territories.

At the Census of 30th June, 1933, special arrangements were made to obtain complete information concerning each of the six Territories of Australia including the Mandated Territories of New Guinea and Nauru, namely :—(1) Northern Territory; (2) Australian Capital Territory; (3) Norfolk Island; (4) Papua; (5) Mandated Territory of New Guinea; and (6) Mandated Territory of Nauru.

A summary of the figures as to the population and number of dwellings in each Territory at the Census of 1933 is given in the following table :—

**POPULATION AND DWELLINGS : TERRITORIES, 30th JUNE, 1933.**  
(EXCLUDING INDIGENOUS POPULATION.)

Territory.	Population.			Dwellings.			
	Males.	Females.	Persons.	Occu- pied.	Unocu- pied.	Being Built.	Total.
Northern Territory ..	3,378	1,472	4,850	1,301	55	1	1,357
Australian Capital Territory ..	4,805	4,142	8,947	1,995	103	5	2,103
Norfolk Island ..	662	569	1,231	383	34	6	423
Papua ..	1,232	941	2,173	683	35	1	719
Territory of New Guinea (Mandate) ..	3,709	1,507	5,216	1,776	26	7	1,809
Nauru (Mandate) ..	1,037	64	1,101	81	13	..	94



Particulars concerning the indigenous populations of the Territories of Australia are included in Chapter XI. "The Territories of Australia".

A Census was taken in the Australian Capital Territory on 30th June, 1938, and the results were as follows :—

Population : Males, 6,286 ; Females, 5,276 ; Total, 11,562.

Occupied Dwellings : 2,477.

Since the 1933 Census the population had increased by 29 per cent. and the number of occupied dwellings by 24 per cent.

### § 15. The Aboriginal Population of Australia.

In Official Year Book No. 17, pp. 951-61, a brief account is given of the Australian aboriginal population, its origin, its numbers as estimated from time to time, and the steps taken for its protection. On pp. 914-16 of Official Year Book No. 22, particulars are shown for each of the States and Territories of Australia at successive periods, while a special article dealing with the estimated number and distribution of the native population at the date of first settlement of the white race in the continent appears on pp. 687-96 of Official Year Book No. 23.

The aborigines are scattered over the whole of the mainland, but the majority are concentrated in Western Australia, Queensland and the Northern Territory. At a Census of aborigines taken on 30th June, 1941, the last Census to be taken for the duration of the war, the following particulars were disclosed :—

#### ABORIGINAL CENSUS, 30th JUNE, 1941.

State or Territory.	Full-blood.					Half-caste.					Total Full-blood and Half-caste.
	Noma-dic.	In Employ-ment.	In Super-vised Camps. (a)	Other.	Total.	Noma-dic.	In Employ-ment.	In Super-vised Camps. (a)	Other.	Total.	
New South Wales	40	112	314	128	594	505	2,057	3,403	4,057	10,022	10,616
Victoria ..	..	17	16	55	88	32	170	224	261	687	775
Queensland (b) ..	1,651	3,238	3,146	942	8,977	36	1,792	1,853	2,770	6,451	15,428
South Australia ..	1,540	445	472	341	2,798	631	465	878	246	2,220	5,018
Western Australia	15,159	3,653	2,043	854	21,709	402	1,300	1,668	1,037	4,407	26,116
Tasmania ..	..	..	..	1	1	..	10	184	90	284	285
Northern Territory	6,420	2,705	4,218	108	13,451	16	445	438	138	1,037	14,488
Australian Capital Territory ..	..	..	2	..	2	..	20	63	..	83	85
Australia ..	24,810	10,170	10,211	2,429	47,620	1,622	6,259	8,711	8,599	25,191	72,811

(a) This figure does not include those living in supervised camps who were in regular employment.

(b) Excludes Torres Strait Islanders (870 in regular employment, 2,764 in supervised camps, and 41 other).

### § 16. The Chinese in Australia.

In Official Year Book No. 18, pp. 951-6, a brief historical sketch is given regarding "The Chinese in Australia".

### § 17. The Pacific Islanders in Australia.

In Official Year Book No. 19, pp. 902-3, a brief account is given of the introduction of Kanakas into Australia.

## CHAPTER XIII. VITAL STATISTICS.

### § 1. Live Births.

1. Number, 1941.—The number of live births registered in Australia during the year ended 31st December, 1941, is shown in the table below. The numerical relation which these births bear to the population, and various other associated features, are given in later tables.

#### LIVE BIRTHS, 1941.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aus.	W. Aus.	Tas.	N.T.	A.C.T.	Australia.
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#### MALES.

Single births	25,825	17,422	10,854	5,617	4,992	2,564	98	167	67,539
Twins ..	564	326	222	110	116	68	..	1	1,407
Triplets ..	7	..	2	6	..	..	..	..	15
<b>Total ..</b>	<b>26,396</b>	<b>17,748</b>	<b>11,078</b>	<b>5,733</b>	<b>5,108</b>	<b>2,632</b>	<b>98</b>	<b>168</b>	<b>68,961</b>

#### FEMALES.

Single births	24,730	16,305	10,227	5,153	4,900	2,526	118	194	64,153
Twins ..	597	350	210	76	110	48	..	4	1,395
Triplets ..	6	3	4	3	..	..	..	..	16
<b>Total ..</b>	<b>25,333</b>	<b>16,658</b>	<b>10,441</b>	<b>5,232</b>	<b>5,010</b>	<b>2,574</b>	<b>118</b>	<b>198</b>	<b>65,564</b>

#### TOTAL.

Single births	50,555	33,727	21,081	10,770	9,892	5,090	216	361	131,692
Twins ..	(a) 1,161	(b) 676	432	186	(c) 226	116	..	(d) 5	(e) 2,802
Triplets ..	(f) 13	3	6	9	..	..	..	..	(f) 31
<b>Total ..</b>	<b>51,729</b>	<b>34,406</b>	<b>21,519</b>	<b>10,965</b>	<b>10,118</b>	<b>5,206</b>	<b>216</b>	<b>366</b>	<b>134,525</b>

#### TOTAL CONFINEMENTS (LIVE BIRTHS).

Mothers of Nuptial Children ..	49,155	32,946	20,245	10,558	9,644	4,923	195	361	128,027
Mothers of Ex-nuptial Children ..	2,009	1,130	1,054	308	364	225	21	3	5,114
<b>Total Mothers</b>	<b>51,164</b>	<b>34,076</b>	<b>21,299</b>	<b>10,866</b>	<b>10,008</b>	<b>5,148</b>	<b>216</b>	<b>364</b>	<b>133,141</b>

(a) Excludes 47 still-born twins. (b) Excludes 20 still-born twins. (c) Excludes 6 still-born twins.  
 (d) Excludes 1 still-born twin. (e) Excludes 74 still-born twins. (f) Excludes 2 still-born triplets.

A summary of the total number of live births in each State and Territory at intervals since 1901 is given in the following table :—

## LIVE BIRTHS, 1901 to 1941.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
1901 ..	37,875	31,008	14,303	9,079	5,718	4,930	32	(a)	102,945
1911 ..	47,537	33,026	16,984	11,057	8,091	5,437	31	30	122,193
1921 ..	54,636	35,591	20,329	11,974	7,807	5,755	79	27	136,198
1931 ..	47,721	30,332	17,833	9,079	8,549	4,762	72	161	118,509
1936 ..	46,193	28,883	18,755	8,911	8,479	4,581	113	158	116,073
1937 ..	47,497	29,731	19,162	8,985	8,609	4,841	99	207	119,131
1938 ..	47,319	30,344	18,992	9,410	9,141	4,907	102	200	120,415
1939 ..	48,003	30,493	20,348	9,618	9,036	5,004	138	251	122,891
1940 ..	49,382	31,962	20,412	10,017	9,121	4,994	173	286	126,347
1941 ..	51,729	34,406	21,519	10,965	10,118	5,206	216	366	134,525

(a) Part of New South Wales.

2. Birth-rates.—The next table gives the crude birth-rates at intervals from 1901 to 1941 :—

## CRUDE BIRTH-RATES.(a)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
1901 ..	27.78	25.77	28.52	25.41	30.39	28.58	6.72	(b)	27.16
1911 ..	28.58	25.01	27.63	28.86	28.22	28.60	9.36	16.84	27.20
1921 ..	25.91	23.16	26.68	24.09	23.37	26.97	20.18	10.86	24.95
1930 ..	20.59	18.55	20.80	17.42	21.44	21.66	14.26	18.30	19.86
1931 ..	18.67	16.86	19.28	15.77	19.77	21.18	14.52	18.29	18.16
1932 ..	17.40	15.19	18.56	14.74	18.31	19.78	16.07	16.92	16.86
1933 ..	16.99	15.60	18.14	15.32	17.95	19.93	15.23	(c)14.43	16.78
1934 ..	16.52	15.20	18.17	14.50	17.66	19.51	17.84	(c)14.20	16.39
1935 ..	16.89	15.16	18.31	14.14	18.23	19.41	16.47	(c)15.20	16.55
1936 ..	17.31	15.63	19.17	15.17	18.84	19.84	21.50	(c)15.35	17.13
1937 ..	17.63	16.02	19.36	15.25	18.95	20.69	18.30	(c)18.99	17.43
1938 ..	17.39	16.25	18.98	15.88	19.87	20.82	17.81	17.98	17.46
1939 ..	17.46	16.20	20.08	16.13	19.43	21.02	21.94	20.93	17.65
1940 ..	17.79	16.79	19.92	16.74	19.49	20.79	20.98	22.44	17.96
1941 ..	18.48	17.76	20.80	18.26	21.62	21.74	21.30	27.98	18.94

(a) Number of births per 1,000 of the annual mean population.

(b) Part of New South Wales.

(c) Revised rates based on mean population adjusted in accordance with the results of Census of 30th June, 1938. See footnote (c) to table on p. 263.

NOTE.—The birth-rates in the table above are based on live births registered in the respective States and Territories. Until recently a large proportion of births in respect of which the mother's usual residence was the Australian Capital Territory took place in Queanbeyan, just over the New South Wales border, but with improved hospital facilities in the Territory the movement to outside hospitals rapidly diminished and was actually reversed in 1939. The following rates, based on births in respect of which the mother's usual residence is the Australian Capital Territory, are a truer measure of birth-rates in the Australian Capital Territory :—

1930 ..	22.07	1934 ..	17.59	1938 ..	18.88
1931 ..	21.40	1935 ..	19.52	1939 ..	20.02
1932 ..	20.09	1936 ..	17.97	1940 ..	21.42
1933 ..	19.06	1937 ..	21.28	1941 ..	27.14

The variations similarly caused in the birth-rates for the States and Northern Territory by referring the birth registrations to the State or Territory in which the mother was usually resident are shown by the following corrected rates for 1941 :—New South Wales, 18.51; Victoria, 17.65; Queensland, 20.88; South Australia, 18.27; Western Australia, 21.65; Tasmania, 21.84; and Northern Territory, 22.29.



The preceding table shows a marked reduction in the birth-rate since 1901. In the earlier years of the century the rate fluctuated somewhat and 28.60 was recorded in 1912, but from that year onwards the rate dropped almost continuously to the very low figure of 16.39 in 1934. With the improvement in economic conditions the rate has risen slightly during each of the six years, 1935 to 1940. The sharp increase in the rate for the year 1941 may be attributed only in part to economic conditions. Investigation indicates that the rates for births other than first were generally slightly higher than might have been expected from pre-war experience; but that the increase mostly reflects the advancement of marriages occasioned by abnormal war-time influences.

The principal factor in determining the crude birth-rate is the proportion of married women of child-bearing age in the community, but as the fecundity of women varies with age, the birth-rate per 1,000 married women will vary according to the age composition of the group, and, other things being equal, the rate generally should be highest where the average age of married women is lowest. For the purposes of the following table the child-bearing age has been taken as from 15-44 years inclusive, and births of which the mothers were stated to be over 45 years have been counted in the group 40-44. The calculations have been made for the last two Census periods and cover in each case the Census year together with the year immediately preceding and the year immediately following.

#### BIRTH-RATES, AND FACTORS AFFECTING THEM.

Particulars.	1932-34. (Age Distribution at Census of 1933.)							1920- 1922.
	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.	Aust.
Crude birth-rate per 1,000 persons	16.97	15.33	18.29	14.85	17.97	19.74	16.68	25.15
Birth-rate per 100 women 15-44 inclusive	7.25	6.46	7.93	6.31	8.05	8.71	7.14	10.74
Birth-rate per 100 married women 15-44 inclusive (a)	12.98	12.34	14.46	12.01	14.67	16.08	13.14	19.65
Ex-nuptial births—per cent. on all births	5.03	4.35	4.99	3.18	4.15	5.37	4.66	4.69
Ex-nuptial births per 100 unmarried women 15-44 inclusive	0.78	0.56	0.83	0.41	0.70	0.96	0.69	1.05
Women 15-44 inclusive—per cent. on all persons	23.41	23.73	23.05	23.54	22.34	22.66	23.35	23.41
Average age of all women 15-44 inclusive	29.06	29.42	28.88	29.12	28.62	28.54	29.10	28.54
Married women 15-44 inclusive—per cent. on all persons	12.41	11.88	12.02	11.97	11.74	11.61	12.10	12.20
Average age of married women 15-44 inclusive	33.38	34.00	33.41	33.98	33.21	32.98	33.58	32.48

(a) Nuptial births only.

The following figures give a comparison for Australia, based on data obtained at Census periods, of the total births per 1,000 women (married and unmarried) and of the nuptial births per 1,000 married women of ages 15-44 years inclusive :—

Particulars.	1880-82.	1890-92.	1900-02.	1910-12.	1920-22.	1932-34.
Births per 1,000 women aged 15-44	169.7	158.8	117.3	117.2	107.4	71.4
Nuptial births per 1,000 married women 15-44	321.0	332.0	235.0	236.0	196.5	131.4

3. *Birth-rates of Various Countries.*—(i) *Crude Rates.* A comparison with other countries for 1940, the latest year for which complete figures are available, shows that the Australian States occupy a midway position. The rates for the period 1908-1913 have been added for purposes of comparison :—

**CRUDE BIRTH-RATES(a) : VARIOUS COUNTRIES.**

Country.	1908 to 1913.	1940.	Country.	1908 to 1913.	1940.
Egypt .. ..	43.6	43.4(b)	Western Australia ..	28.9	19.5
Ceylon .. ..	36.9	35.8	Eire .. ..	23.1	19.1
Japan .. ..	32.9	27.0(b)	Denmark .. ..	27.1	18.3
Rumania .. ..	43.1	26.5	<b>Australia .. ..</b>	<b>27.4</b>	<b>18.0</b>
Union of South Africa (Europeans) ..	(d)	25.3	United States of America .. ..	(d)	17.9
Portugal .. ..	34.6	24.8	New South Wales ..	28.2	17.8
Poland .. ..	37.4	24.5(b)	Scotland .. ..	26.2	17.1
Spain .. ..	32.1	24.0	Czechoslovakia ..	31.1	16.8(b)
Argentine Republic ..	37.1	23.0	Victoria .. ..	25.3	16.8
Italy .. ..	32.4	23.4	South Australia ..	27.1	16.7
New Zealand .. ..	26.5	22.6	Norway .. ..	26.0	16.3
Canada .. ..	(d)	21.4	Switzerland .. ..	24.7	15.2
Finland .. ..	29.5	21.3(c)	Great Britain and Northern Ireland	24.6	15.0
Tasmania .. ..	29.6	20.8	Sweden .. ..	24.4	15.0
Netherlands .. ..	29.1	20.7(c)	England and Wales	24.9	14.6
Germany .. ..	29.5	20.0	France .. ..	19.5	14.6(c)
Queensland .. ..	28.2	19.9	Belgium .. ..	23.4	13.4
Northern Ireland ..	23.1	19.5(c)			

(a) Number of births per 1,000 of the mean population. (b) For 1938. (c) For 1939.  
(d) Not available.

(ii) *Nuptial Birth-rates at Child-bearing Ages.* The wide discrepancies between the crude birth-rates of the various countries are, to some extent, due to differences in sex and age constitution and in conjugal condition. If the birth-rates are calculated per 1,000 women of child-bearing ages, the comparison gives more reliable results. A table of results so calculated for the period 1906 to 1915 or thereabouts appears in Official Year Book No. 22, p. 941, and showed that Australia, with a rate of 198 nuptial births per 1,000 married women aged 15 to 49 years, was midway between the maximum and minimum of the countries for which these rates were obtained.

4. *Masculinity of Live Births.*—(i) *General.* The masculinity of live births, i.e., the number of males per 100 females, varies considerably from State to State and from year to year. For 1941 the figures ranged from 83.05 in Northern Territory to 109.58 in South Australia. The averages for the last intercensal period, 1921 to 1933 were as follows :—New South Wales, 105.33, Victoria, 106.19, Queensland, 105.34, South Australia, 105.08, Western Australia, 105.66, Tasmania, 105.59, Australia, 105.57. The following table shows the figures for Australia at intervals since 1901 :—

**MASCULINITY(a) OF LIVE BIRTHS REGISTERED : AUSTRALIA.**

Particulars.	1901.	1911.	1921.	1931.	1938.	1939.	1940.	1941.
Total Births ..	104.11	104.73	105.86	106.15	105.76	105.37	104.60	105.18
Ex-nuptial Births ..	105.50	103.10	106.09	102.60	104.08	109.88	110.49	103.59

(a) Number of male per 100 female births.

(ii) *Masculinity of Nuptial and Ex-nuptial Births—Various Countries.* A table showing the masculinity of nuptial and ex-nuptial births for various countries appears on p. 942 of Official Year Book No. 22.

5. *Ex-nuptial Live Births.*—(i) *General.* The number of ex-nuptial live births reached its maximum, 7,438, in 1913, but it has since fallen considerably. On the average during the five years 1910–1914 the number of ex-nuptial live births in Australia was 7,171, while for the period 1937–1941 it was only 5,033, a decline of 29.8 per cent., whereas the annual average total live births for the same period declined by 3.5 per cent., from 129,156 to 124,662; hence a comparison between the results for these two periods shows that the proportion of ex-nuptial births has fallen from 5.55 to 4.04 per cent. of all births.

The variations of the ex-nuptial birth-rates as between the individual States and Territories for 1941 are as follows :—

#### EX-NUPTIAL LIVE BIRTHS AND BIRTH-RATES, 1941.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Number..	2,035	1,139	1,062	310	367	230	21	3	5,167
Percentage of Total Births	3.93	3.31	4.94	2.83	3.63	4.42	9.72	0.82	3.84

The numbers of births and the rates at intervals from 1901 to 1941 are shown below :—

#### EX-NUPTIAL LIVE BIRTHS AND BIRTH-RATES : AUSTRALIA.

Particulars.	1901.	1911.	1921.	1931.	1938.	1939.	1940.	1941.
Number of Ex-nuptial Births ..	6,165	7,074	6,463	5,841	5,049	5,012	4,775	5,167
Percentage of Total Births ..	5.99	5.79	4.75	4.93	4.19	4.08	3.78	3.84

It is, of course, possible that the number of ex-nuptial births is somewhat understated owing to diffidence in proclaiming the fact of ex-nuptiality, and it is not unlikely that the majority of unregistered births are ex-nuptial.

(ii) *Rate of Ex-nuptiality.* A further comparison is obtained by calculating the number of ex-nuptial births per thousand of the single and widowed female population between the ages of 15 and 45 years. The number of ex-nuptial births per 1,000 unmarried women of ages 15 to 45 has been found to be as follows :—1880–82, 14.49; 1890–92, 15.93; 1900–02, 13.30; 1910–12, 12.53; and 1920–22, 10.50. The estimated number for the years 1930–32 was 7.87. The comparative results for various countries given on p. 944 of Official Year Book No. 22 were taken from the *Annuaire International de Statistique*, Vols. II. and V., and showed that ex-nuptial births varied from 38 per 1,000 unmarried women aged 15 to 49 years in Hungary to 4 in Ireland and Bulgaria. The rate for Australia was 12 per thousand for the years 1906–1915.



(iii) *Comparison of Rates.* The following table showing the relative proportions of ex-nuptial and nuptial births to the total population discloses a much greater proportional reduction in the ex-nuptial birth-rate than in the nuptial rate :—

**CRUDE EX-NUPTIAL, NUPTIAL, AND TOTAL BIRTH-RATES(a) : AUSTRALIA.**

Rates.	1901.	1911.	1921.	1931.	1938.	1939.	1940.	1941.
Ex-nuptial ..	1.63	1.57	1.18	0.90	0.73	0.72	0.68	0.73
Nuptial ..	25.53	25.63	23.77	17.26	16.73	16.93	17.34	18.21
Total ..	27.16	27.20	24.95	18.16	17.46	17.65	18.02	18.94

(a) Number of births per 1,000 of mean population.

6. *Legitimations.*—In the several States Acts have been passed to legitimize children born before the marriage of their parents, provided that no legal impediment to the marriage existed at the time of birth. On registration in accordance with the provisions of the Legitimation Acts, any child who comes within the scope of their purposes, born before or after the passing thereof, is deemed to be legitimate from birth by the post-natal union of its parents, and entitled to the status of offspring born in wedlock. During 1941, 1,395 children were legitimized in Australia.

7. *Multiple Births.*—Among the total number of 134,525 live births registered in Australia in 1941, there were 131,692 single births, 2,802 twins and 31 triplets. The number of cases of twins was 1,438 and of triplets 11, there being 74 still-born twins and 2 still-born triplets. The total number of mothers was, therefore, 133,141, the proportion of mothers of twins being one in every 93, of mothers of triplets one in every 12,104, and of mothers of all multiple births one in every 92 mothers. Multiple births occurred in 1.09 per cent. of confinements.

The proportion of multiple births to total births does not vary greatly from year to year and exhibits no tendency towards increase or decrease :—

**MULTIPLE BIRTHS : AUSTRALIA.**

Particulars.	1911.	1921.	1931.	1938.	1939.	1940.	1941.
Mothers of Multiple Births ..	1,236	1,465	1,271	1,248	1,280	1,280	1,449
Percentage on Total Mothers ..	1.02	1.09	1.08	1.05	1.05	1.02	1.09
Number of Mothers to each Multiple Birth ..	98	92	92	96	95	98	92

8. *Ages of Parents.*—The relative ages of the parents of children registered in 1941 have been tabulated separately for male and female births, multiple births being distinguished from single births. For total births and for multiple births the relative

single ages of parents are shown in *Demography Bulletin* No. 59, published by this Bureau. In the present work the exigencies of space allow only the insertion of a table showing the relative ages of parents of all births in groups of five years :—

### AGES OF PARENTS : AUSTRALIA, 1941.

Ages of Fathers, and Type of Birth.		Total.	Ages of Mothers.									
			Under 15.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 and upwards.	Un- speci- fied.	
Under 20	{ Single Twins	758 5	1 ..	535 4	213 1	7 ..	1 ..	1 ..	.. ..	.. ..	.. ..	
20 to 24	{ Single Twins	15,928 130	.. ..	3,384 24	10,293 79	2,027 24	186 2	33 1	5 ..	.. ..	.. ..	
25 to 29	{ Single Twins	38,003 363	.. ..	1,733 7	15,720 132	17,536 185	2,720 38	276 1	17 ..	1 ..	.. ..	
30 to 34	{ Single Twins Triplets	34,436 375 3	1 .. ..	432 .. ..	5,686 43 ..	15,111 150 2	11,544 157 1	1,535 25 ..	124 .. ..	3 .. ..	.. .. ..	
35 to 39	{ Single Twins Triplets	21,192 270 7	.. .. ..	122 .. ..	1,406 13 ..	5,125 53 1	8,392 116 5	5,529 74 1	608 14 ..	10 .. ..	.. .. ..	
40 to 44	{ Single Twins Triplets	10,013 143 1	.. .. ..	36 .. ..	381 3 ..	1,359 17 ..	2,852 36 1	3,680 67 ..	1,661 17 ..	44 3 ..	.. .. ..	
45 to 49	{ Single Twins	4,040 64	1 ..	9 ..	99 1	406 2	830 17	1,385 24	1,165 20	145 ..	.. ..	
50 to 54	{ Single Twins	1,547 21	.. ..	3 ..	38 ..	119 1	306 4	473 10	506 5	102 1	.. ..	
55 to 59	{ Single Twins	499 9	.. ..	3 ..	21 ..	52 2	91 3	154 1	146 3	32 ..	.. ..	
60 to 64	Single	150	..	1	5	15	32	47	41	9	..	
65 and Upwards	{ Single Twins	68 1	.. ..	.. ..	2 ..	8 ..	14 1	19 ..	20 ..	5 ..	.. ..	
Unspeci- fied	Single	1	..	..	..	..	..	..	..	1	..	
Mothers of Nuptial Children		{ Single Twins Triplets Total	126,635 1,381 11 128,027	3 .. .. 3	6,258 35 .. 6,293	33,864 272 .. 34,136	41,765 434 3 42,202	26,968 374 7 27,349	13,132 203 1 13,336	4,293 59 .. 4,352	352 4 .. 356	.. .. .. ..
Mothers of Ex- Nuptial Children		{ Single Twins Total	5,057 57 5,114	24 .. 24	1,298 9 1,307	1,764 19 1,783	941 6 947	546 13 559	315 7 322	141 3 144	22 .. 22	6 .. 6
Total Mothers		{ Single Twins Triplets	131,692 1,438 11	27 .. ..	7,556 44 ..	35,628 291 ..	42,706 440 3	27,514 387 7	13,447 210 1	4,434 62 ..	374 4 ..	6 .. ..
Total		..	133,141	27	7,600	35,919	43,149	27,908	13,658	4,496	378	6

9. Birthplaces of Parents.—The birthplaces of the parents of children whose births were registered during 1940 appear in *Demography Bulletin* No. 58.

10. **Occupations of Fathers.**—A summary of the main groups of occupations of the fathers of all nuptial children whose births were registered in 1921, 1931 and 1941, together with the percentage of each class on the total, is given in the following table:—

**OCCUPATIONS OF FATHERS OF NUPTIAL CHILDREN : AUSTRALIA.**

Occupation Group.	Number of Fathers.			Percentage of Total.		
	1921.	1931.	1941.	1921.	1931.	1941.
				%	%	%
Agricultural, Pastoral, Mining, etc. .. ..	32,405	24,760	23,709	25.25	22.21	18.52
Industrial .. ..	53,567	49,902	30,388	41.74	44.76	23.73
Transport and Communication .. ..	15,351	12,302	11,065	11.96	11.04	8.64
Commercial .. ..	18,298	16,030	13,284	14.26	14.38	10.38
Professional .. ..	6,204	5,991	20,228	4.84	5.37	15.80
Domestic .. ..	2,319	2,146	2,403	1.81	1.93	1.88
Indefinite .. ..	182	349	626,950	0.14	0.31	621.05
Total .. ..	128,326	111,480	128,027	100.00	100.00	100.00

(a) Includes 3,701 (2.89 per cent.) clerks, etc., formerly included under "Commercial".  
 (b) Includes 23,661 (18.41 per cent.), labourers, etc., not specified as belonging to any industry, formerly included under "Industrial".

11. **Mother's Age, Duration of Marriage, and Issue.**—(i) *General.* The total number of nuptial confinements resulting in live births in 1941 was 128,027, namely, 126,635 single births, 1,381 cases of twins, and 11 cases of triplets. Ex-nuptial children, if previous issue by the same father, are included as previous issue, but children by former marriages and still-born children are excluded. The table cannot be given in detail but the following are their most salient features. The complete tabulations are shown in *Demography Bulletin* No. 59, issued by this Bureau.

(ii) *Duration of Marriage and Issue of Mothers.* The following table shows that the duration of marriage of mothers of nuptial children ranged from less than one year up to 34 years, and that the average family increased fairly regularly with the duration of marriage. The average issue of married mothers who bore children in 1941 was 2.39 compared with 2.44 in 1940, 2.48 in 1939, 2.54 in 1938, and 2.60 in 1937.

**DURATION OF MARRIAGE AND ISSUE OF MOTHERS : AUSTRALIA, 1941.**

Duration of Marriage.	Total Mothers.	Total Issue.	Average Number of Children.	Duration of Marriage.	Total Mothers.	Total Issue.	Average Number of Children.
Years.				Years.			
0-1 ..	20,996	21,342	1.02	18-19 ..	824	5,392	6.45
1-2 ..	19,589	22,961	1.17	19-20 ..	670	4,512	6.85
2-3 ..	14,857	24,018	1.62				
3-4 ..	12,666	24,519	1.94	20-21 ..	591	4,213	7.13
4-5 ..	10,976	24,449	2.23	21-22 ..	406	3,137	7.73
				22-23 ..	254	2,140	8.43
5-6 ..	9,150	23,011	2.51	23-24 ..	186	1,692	9.10
6-7 ..	7,265	20,242	2.79	24-25 ..	96	893	9.30
7-8 ..	5,415	16,841	3.11				
8-9 ..	4,376	14,967	3.42	25-26 ..	81	730	9.01
9-10 ..	3,533	12,945	3.66	26-27 ..	61	614	10.07
				27-28 ..	38	363	9.55
10-11 ..	2,932	11,679	3.98	28-29 ..	15	118	7.87
11-12 ..	2,754	11,604	4.21	29-30 ..	12	120	10.00
12-13 ..	2,522	11,387	4.52				
13-14 ..	2,213	10,749	4.86	30-31 ..	1	16	16.00
14-15 ..	1,790	9,101	5.08	31-32 ..	2	26	13.00
				33-34 ..	1	8	8.00
15-16 ..	1,410	7,710	5.47	Not Stated	15	51	3.40
16-17 ..	1,316	7,684	5.84				
17-18 ..	1,014	6,418	6.33	Total ..	128,027	305,652	2.39



(iii) *Ages of Mothers and Issue.* The following table shows the average number of children borne by mothers of different ages. In the younger ages there is, naturally, little difference in the average number of children to each mother, but with the increase of the age of the mother the number of issue has fallen in comparison with past years. During the period 1911 to 1941 the average issue of mothers of all ages has fallen by 28.45 per cent.—from 3.34 in 1911 to 2.39 in 1941 :—

#### AGES AND ISSUE OF MOTHERS : AUSTRALIA.

Ages of Mothers.	Average Number of Children.				Ages of Mothers.	Average Number of Children.			
	1911.	1921.	1931.	1941.		1911.	1921.	1931.	1941.
Under 20 years ..	1.18	1.16	1.21	1.19	40-44 years ..	6.97	6.27	6.00	5.34
20-24 years ..	1.77	1.64	1.74	1.58	45 years and over ..	8.52	8.04	7.48	7.01
25-29 „ ..	2.64	2.44	2.46	2.10					
30-34 „ ..	3.82	3.57	3.44	2.85					
35-39 „ ..	5.28	4.95	4.71	3.90	All Ages ..	3.34	3.08	2.95	2.39

(iv) *Previous Issue of Mothers, Various Ages.* A classification of mothers of various ages according to previous issue is given in the following table :—

#### MOTHERS OF VARIOUS AGES ACCORDING TO PREVIOUS ISSUE : AUSTRALIA, 1941.

Previous Issue.	Mothers' Ages.							
	Under 20 Years.	20-24 Years.	25-29 Years.	30-34 Years.	35-39 Years.	40-44 Years.	45 Years and Over.	Total
0	5,191	20,324	17,099	6,774	2,050	394	19	51,851
1	990	9,360	13,106	7,768	2,613	493	19	34,349
2	112	3,206	6,488	5,354	2,452	588	19	18,219
3	3	974	3,092	2,976	1,858	542	40	9,485
4	..	236	1,437	1,868	1,287	485	41	5,354
5	..	29	660	1,236	1,008	431	37	3,401
6	..	4	223	691	780	370	23	2,091
7	..	2	70	385	504	289	37	1,287
8	..	..	20	174	352	247	35	828
9	..	1	4	77	198	202	22	504
10	..	..	2	22	120	150	26	320
11	..	..	1	19	62	65	16	163
12	..	..	..	2	30	46	10	88
13	..	..	..	3	16	28	2	49
14	..	..	..	..	5	13	3	21
15	..	..	..	..	..	5	4	9
16	..	..	..	..	1	3	1	5
17	..	..	..	..	..	1	1	2
18	..	..	..	..	..	..	1	1
Total Mothers	6,296	34,136	42,202	27,349	13,336	4,352	356	128,027

(v) *Previous Issue of Mothers of Twins and Triplets.* Figures regarding the previous issue of married mothers of twins show that 464 mothers had no previous issue either living or deceased, 330 had one child previously, while 237 had two previous issue, 128 three, 82 four, 54 five, 32 six, 19 seven, 15 eight, 10 nine, 2 ten, 2 eleven, 3 twelve, and 3 thirteen previous issue.

Of the 11 cases of triplets registered during 1941, 2 mothers had no previous issue, 3 had one previous issue, 2 had two previous issue, 2 had three previous issue, and 2 had five previous issue.

12. *Interval between Marriage and First Birth.*—(i) *Interval.* The following table shows the interval between marriage and first birth for the years 1911, 1921, 1931 and 1941 respectively. Twins and triplets are included, the eldest only being enumerated:—

### INTERVAL BETWEEN MARRIAGE AND FIRST BIRTH : AUSTRALIA.

Interval.	Number of First Children.				Percentage of Total.			
	1911.	1921.	1931.	1941.	1911.	1921.	1931.	1941.
					%	%	%	%
Under 1 month ..	562	437	395	240	1.81	1.07	1.15	0.46
1 month ..	608	538	523	333	1.96	1.31	1.52	0.64
2 months ..	817	735	750	490	2.63	1.79	2.17	0.94
3 " ..	1,125	1,017	1,135	714	3.63	2.48	3.29	1.38
4 " ..	1,299	1,336	1,409	1,094	4.19	3.26	4.09	2.11
5 " ..	1,651	1,781	1,968	1,725	5.33	4.34	5.71	3.33
6 " ..	2,089	2,420	2,517	2,604	6.74	5.90	7.30	5.02
7 " ..	1,602	2,231	2,022	2,201	5.17	5.44	5.86	4.24
8 " ..	1,529	1,950	1,139	1,774	4.93	4.75	3.30	3.42
9 " ..	3,361	4,222	2,272	3,627	10.84	10.29	6.59	7.00
10 " ..	2,623	3,630	1,859	3,132	8.46	8.85	5.39	6.04
11 " ..	1,893	2,645	1,636	2,762	6.11	6.45	4.74	5.33
Total under 1 year	19,159	22,942	17,625	20,696	61.80	55.93	51.11	39.91
1- 2 years ..	7,400	11,149	8,888	10,348	23.87	27.18	25.77	31.53
2- 3 " ..	2,101	2,923	3,441	6,441	6.78	7.13	9.98	12.42
3- 4 " ..	908	1,413	1,823	3,453	2.93	3.45	5.29	6.66
4- 5 " ..	471	837	967	1,084	1.52	2.04	2.80	3.83
5- 9 " ..	762	1,473	1,424	2,533	2.46	3.59	4.13	4.89
10-14 " ..	159	223	262	337	0.51	0.54	0.76	0.65
15-19 " ..	31	54	50	47	0.10	0.13	0.14	0.09
20 years and over	9	4	6	12	0.03	0.01	0.02	0.02
Total ..	31,000	41,018	34,486	51,851	100.00	100.00	100.00	100.00

The masculinity of first births in 1941 was 105.88 compared with 105.18 for total births.

(ii) *Ages of Mothers and Interval.* The previous issue of mothers of ex-nuptial children is not recorded, but for the purposes of the following table all ex-nuptial births have been assumed to be first births. The table shows in a condensed form the ages of mothers in cases of ex-nuptial births, of nuptial first births occurring less than nine months after marriage, and of all ex-nuptial and nuptial first births. A comparison of the combined total of the first two columns with the total of nuptial children born nine months or more after marriage shows that for all ages the ratio was a little less than 1 to 2. At all ages up to and including 21, however, there was a preponderance of ex-nuptial births and of births following on ante-nuptial conception. It must, of course, be understood that a certain number of premature births is necessarily included among the births which occurred less than nine months after marriage, but information in connexion therewith is not available, and the figures in the table must be accepted with this reservation. The tabulation in single ages of mothers appears in *Demography Bulletin* No. 59, published by this Bureau.

The last four columns show the percentage of births following ante-nuptial conception on the total nuptial first births and ex-nuptial births. These columns disclose the remarkable fact that the percentage of births due to ante-nuptial conception diminishes rapidly from about 23 per cent. among mothers under 20 years of age to a minimum of about 14 per cent. among mothers 25 to 34 years and then rises perceptibly for mothers of older ages.

### AGES OF MOTHERS AND INTERVAL BETWEEN MARRIAGE AND FIRST BIRTH : AUSTRALIA.

Age of Mother at Birth of Child.	1941.				Percentage Column III. on Column IV.			
	Ex-nuptial Births.	Nuptial Births less than nine months after Marriage.	Total of two preceding columns.	Nuptial First Births and Ex-nuptial Births.	1911.	1921.	1931.	1941.
	I.	II.	III.	IV.				
Under 20 years	1,333	3,430	4,763	6,524	83.12	79.23	82.60	73.01
20 to 24 years	1,786	5,358	7,144	22,110	53.91	45.82	48.43	32.31
25 to 29 "	948	1,668	2,616	18,047	32.50	25.60	21.89	14.50
30 to 34 "	559	504	1,063	7,333	28.06	23.05	22.20	14.50
35 to 39 "	322	181	503	2,372	32.64	29.43	30.86	21.21
40 to 44 "	144	31	175	538	36.56	35.31	38.95	32.53
45 and over ..	22	3	25	41	60.47	54.84	48.89	60.98
Total ..	5,114	11,175	16,289	56,965	48.14	39.74	43.80	28.59

13. Interval between Birth and Registration of Birth.—Detailed information for the years 1911 to 1921 regarding the period which elapsed between birth and registration of birth is contained in *Demography Bulletins* issued by this Bureau for those years. The average interval for 1921 was 14.22 days for all children.

## § 2. Still-births.

Reliable statistics of the number of children born dead in Australia are not available as registration of these births is not compulsory in all the Australian States. Based on such information as is available the estimated number of still-births in Australia during 1941 was approximately 3,800.

## § 3. Marriages.

1. Number, 1941.—The number of marriages registered in Australia during the year ended 31st December, 1941, was 75,148, giving a rate of 10.58 per 1,000 of the mean population for the year. In 1940 both the number and the rate were the highest on record. A summary of the number of marriages in each State and Territory at intervals since 1901 is given in the following table :—

### MARRIAGES, 1901 to 1941.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
1901 ..	10,538	8,406	3,341	2,304	1,821	1,338	5	(a)	27,753
1911 ..	15,278	11,088	5,167	4,036	2,421	1,477	10	5	39,482
1921 ..	18,506	13,676	5,993	4,383	2,656	1,668	15	2	46,869
1931 ..	15,377	10,182	5,951	3,069	2,741	1,501	25	36	38,882
1936 ..	22,873	15,915	8,306	5,182	4,242	2,073	41	77	58,709
1937 ..	23,188	16,226	8,353	5,340	4,169	2,042	69	61	59,448
1938 ..	24,579	17,113	8,853	5,489	4,153	2,082	67	75	62,411
1939 ..	25,471	17,368	9,108	5,670	4,195	2,264	85	88	64,249
1940 ..	30,364	22,299	10,287	6,950	5,234	2,476	154	125	77,889
1941 ..	29,983	20,898	9,885	6,855	5,077	2,150	179	121	75,148

(a) Part of New South Wales.



2. **Crude Marriage-rates.**—The crude marriage-rates for each State and Territory for a series of years are given hereunder :—

## CRUDE MARRIAGE-RATES.(a)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
1901 ..	7.73	6.99	6.66	6.45	9.68	7.76	1.05	(b)	7.32
1911 ..	9.19	8.40	8.41	9.80	8.44	7.77	3.02	2.81	8.79
1921 ..	8.78	8.90	7.82	8.82	7.95	7.82	3.83	0.80	8.59
1930 ..	6.86	6.52	6.81	5.78	7.47	6.56	6.23	3.79	6.69
1931 ..	6.02	5.66	6.43	5.33	6.34	6.68	5.04	4.09	5.96
1932 ..	6.73	6.49	6.86	6.29	6.68	6.64	4.47	4.82	6.63
1933 ..	7.07	6.96	6.84	6.84	7.69	7.13	5.76	(c)5.84	7.03
1934 ..	7.70	7.57	7.99	7.39	8.34	7.32	6.08	(c)6.15	7.71
1935 ..	8.45	8.38	8.57	8.28	8.55	8.17	8.23	(c)7.60	8.45
1936 ..	8.57	8.61	8.49	8.82	9.43	8.97	7.80	(c)7.48	8.66
1937 ..	8.61	8.74	8.44	9.06	9.18	8.73	12.75	(c)5.60	8.70
1938 ..	9.03	9.16	8.85	9.26	9.03	8.83	11.70	6.74	9.05
1939 ..	9.27	9.23	8.99	9.51	9.02	9.51	13.51	7.34	9.23
1940 ..	10.94	11.71	10.04	11.62	11.18	10.31	18.68	9.81	11.08
1941 ..	10.71	10.79	9.55	11.42	10.85	8.98	17.65	9.25	10.58

(a) Number of marriages (not persons married) per 1,000 of mean annual population. (b) Part of New South Wales. (c) Revised rates based on mean population adjusted in accordance with the results of the Census of 30th June, 1938. See footnote (c) to table on p. 263.

As in some international tabulations the marriage-rates are calculated per 1,000 of the unmarried population of 15 years and over, the corresponding rates have been worked out for Australia for the last six census periods for which the particulars are available. The figures comprise in each case the census year with the year immediately preceding and the year immediately following, and are as follows:—Years 1880–82, 48.98; years 1890–92, 45.74; years 1900–02, 42.14; years 1910–12, 50.44; years 1920–22, 56.02; and years 1932–34, 42.88. These rates refer, of course, to persons married, and not to marriages as is the case in the preceding table.

3. **Marriage-rates in Various Countries.**—The following table shows the marriage-rate for Australia for 1939, in comparison with the rates for various other countries :—

## CRUDE MARRIAGE-RATES(a) : VARIOUS COUNTRIES.

Country.	1908 to 1913.	1939.	Country.	1908 to 1913.	1939.
New Zealand ..	8.5	11.1	Queensland ..	8.2	9.0
Germany ..	7.8	11.1	Western Australia ..	8.1	9.0
U.S. of America ..	(c)	11.0(e)	Norway ..	6.2	8.9
Union of South Africa(b)	(c)	10.8	Rumania ..	9.5	8.8(d)
England and Wales ..	7.6	10.6	Poland ..	7.0	8.0(d)
Great Britain and Northern Ireland ..	7.3	10.5	Japan ..	9.3	7.5(d)
South Australia ..	9.1	9.5	Switzerland ..	7.3	7.5
Tasmania ..	7.9	9.5	Argentina ..	6.8	7.3
Sweden ..	6.0	9.5	Italy ..	7.7	7.2
Denmark ..	7.3	9.4	Czechoslovakia ..	7.7	7.2(d)
New South Wales ..	8.8	0.3	Northern Ireland ..	5.2	7.1
<b>Australia ..</b>	<b>8.4</b>	<b>9.2</b>	Belgium ..	7.9	6.5
Victoria ..	8.0	9.2	Portugal ..	6.9	6.4
Netherlands ..	7.5	9.2	France ..	7.9	6.2(g)
Scotland ..	6.7	9.2	Spain ..	7.0	6.1(f)
Finland ..	6.1	9.2(d)	Ceylon ..	5.2	5.8(d)
Canada ..	(c)	0.2	Eire ..	5.2	5.2

(a) Number of marriages per 1,000 of mean population. (b) European population only. (c) Not available. (d) For 1938. (e) For 1937. (f) For 1935. (g) Excludes Alsace-Lorraine.



(iii) *Average Ages, Bridegrooms and Brides.* The age at marriage of brides declined slightly during recent years to an average of about 25½ years, although in the years 1937 to 1939 this decline was temporarily arrested and the average rose to almost 26 years. The ages for the past five years are:—1937, 25.86; 1938, 25.92; 1939, 25.87; 1940, 25.74 and 1941, 25.75. For the following quinquennia the average ages were:—1911–15, 25.76 years; 1916–20, 26.05 years; 1921–25, 25.76 years; 1926–30, 25.57 years; 1931–35, 25.50 years; and 1936–40, 25.72 years. The average age of bridegrooms was in 1937, 29.41; in 1938, 29.52; in 1939, 29.39; in 1940, 29.08; and in 1941, 29.04 years. It follows, therefore, that brides are, generally speaking, three and one-half years younger than bridegrooms. The average ages of brides and bridegrooms for the years 1940 and 1941 show the effects of war-time conditions. The proportion of young persons marrying during those years increased, thereby causing decreases in the average ages of both brides and bridegrooms. At the same time the difference in ages between brides and bridegrooms fell from 3.55 years in 1937, 3.60 in 1938 and 3.52 in 1939 to 3.34 in 1940 and 3.29 in 1941.

5. *Previous Conjugal Condition.*—The number of bachelors and spinsters, widowed and divorced persons, who were married during 1941, has already been given. The following table shows the conjugal condition of the contracting parties:—

**PREVIOUS CONJUGAL CONDITION OF PERSONS MARRIED: AUSTRALIA, 1941.**

Conjugal Condition of Bridegrooms.			Total Bridegrooms.	Brides.		
				Spinsters.	Widows.	Divorced.
Bachelors ..	..	..	69,616	66,401	1,480	1,735
Widowers ..	..	..	3,352	1,054	1,024	374
Divorced ..	..	..	2,180	1,606	229	345
Total Brides ..			75,148	69,961	2,733	2,454

6. *Birthplaces of Persons Married.*—A table showing the birthplaces of persons who were married in 1911, 1921 and 1940 may be found on p. 326 of the Official Year Book No. 34. In *Demography Bulletin*, No. 58, the relative birthplaces of bridegrooms and brides married in 1940 will be found tabulated in detail.

7. *Occupations and Ages of Bridegrooms.*—For the year 1938 the average ages at marriage of bridegrooms in the larger classes of occupations were as follows:—Professional, 30.8 years; Domestic, 30.5 years; Commercial, 29.6 years; Transport, 29.8 years; Industrial, 28.9 years; and Primary Producers, 30.9 years.

8. *Fertility of Marriages.*—The quotient obtained by division of the nuptial births registered, e.g., during the five years 1937 to 1941, by the number of marriages registered during the five years 1932 to 1936, i.e., the period antecedent by five years to the period of the births, has been called the "fertility of marriages." The quotient for this period is 2.33—in other words, the number of children to be expected from every marriage in Australia is under three. This method, while not absolutely accurate, generally furnishes results which agree fairly well with those found by more elaborate and careful investigation. For the following quinquennia the results were:—1930–34, 2.30; 1931–35, 2.27; 1932–36, 2.35; 1933–37, 2.44; 1934–38, 2.51; 1935–39, 2.52; 1936–40, 2.44; and 1937–41, 2.33.

9. *Celebration of Marriages.*—In all the States marriages may be celebrated either by ministers of religion who are registered for that purpose with the Registrar-General, or by certain civil officers—in most cases district registrars. Most of the



marriages are celebrated by ministers of religion. The registered ministers in 1941 belonged to more than forty different denominations, some of which, however, can hardly be regarded as having any valid existence. A number of these have been omitted from the tabulation and are bracketed under the heading "Other Christian." The figures for 1941 are shown in the following table :—

### MARRIAGES IN EACH DENOMINATION, 1941.

Denomination.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Australia.	
									No.	Per Cent.
Church of England ..	12,031	6,581	2,936	1,712	2,060	883	50	59	26,312	35.01
Roman Catholic ..	6,217	4,145	2,214	862	732	332	40	27	14,569	19.39
Methodist ..	3,257	2,942	1,554	2,071	699	339	16	8	10,886	14.49
Presbyterian ..	3,446	3,621	1,753	322	415	158	36	10	9,761	12.99
Baptist ..	557	761	241	272	78	85	..	1	1,995	2.66
Congregational ..	531	307	139	280	134	73	..	..	1,464	1.95
Church of Christ ..	131	469	110	282	82	23	..	..	1,097	1.46
Lutheran ..	42	68	202	256	4	..	..	..	572	0.76
Salvation Army ..	138	184	151	45	26	12	..	..	556	0.74
Seventh-Day Adventist ..	84	34	20	17	16	6	..	..	177	0.24
Greek Orthodox ..	9	..	..	..	..	..	..	..	9	0.01
Unitarian ..	6	69	..	10	..	..	..	..	85	0.11
Other Christian ..	169	121	190	39	36	26	1	..	522	0.77
Hebrew ..	112	117	7	3	19	..	..	..	258	0.34
Civil Officers ..	3,253	1,479	368	684	776	213	36	16	6,825	9.08
<b>Total ..</b>	<b>29,983</b>	<b>20,898</b>	<b>9,885</b>	<b>6,855</b>	<b>5,077</b>	<b>2,150</b>	<b>179</b>	<b>121</b>	<b>75,148</b>	<b>100.0</b>
Marriages celebrated by—										
Ministers of Religion per cent.	89.15	92.92	96.28	90.02	84.72	90.09	79.89	86.78	90.92	..
Civil Officers per cent.	10.85	7.08	3.72	9.98	15.28	9.91	20.11	13.22	9.08	..

### § 4. Deaths.

1. Number of Deaths, 1941.—The following table shows the number of deaths, male and female, registered in each State during the year :—

### DEATHS, 1941.

Sex.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Australia.
Male ..	15,209	10,856	5,554	3,399	2,888	1,364	95	44	39,409
Female ..	12,091	9,666	3,976	2,889	1,881	1,211	27	26	31,767
<b>Total ..</b>	<b>27,300</b>	<b>20,522</b>	<b>9,530</b>	<b>6,288</b>	<b>4,769</b>	<b>2,575</b>	<b>122</b>	<b>70</b>	<b>71,176</b>

A summary of the total number of deaths in each State and Territory at intervals since 1901 is given in the following table :—

## DEATHS, 1901 to 1941.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
1901 ..	16,021	15,904	6,007	3,974	2,519	1,814	91	(a)	46,330
1911 ..	17,146	15,216	6,544	4,038	2,923	1,927	65	10	47,869
1921 ..	20,026	16,165	7,142	4,982	3,480	2,197	80	4	54,076
1931 ..	21,270	17,033	7,525	4,888	3,681	2,057	70	36	56,560
1936 ..	24,376	18,778	8,593	5,464	4,230	2,387	60	44	63,932
1937 ..	25,235	18,613	9,006	5,247	4,065	2,225	63	42	64,496
1938 ..	26,105	18,955	9,201	5,539	4,234	2,288	69	60	66,451
1939 ..	26,815	20,169	9,530	5,739	4,336	2,426	88	44	69,147
1940 ..	26,143	20,293	9,203	5,708	4,486	2,387	86	78	68,384
1941	27,300	20,522	9,530	6,288	4,769	2,575	122	70	71,176

(a) Part of New South Wales prior to 1911.

2. Crude Death-rates.—The crude death-rates at intervals from 1901 to 1941 are shown in the following table :—

## CRUDE DEATH-RATES.(a)

Year and Sex.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
1901 ..	11.75	13.22	11.98	11.12	13.39	10.51	19.10	(b)	12.22
1911 ..	10.31	11.52	10.65	9.81	10.19	10.14	19.63	5.61	10.66
1921 ..	9.50	10.52	9.37	10.02	10.42	10.30	20.44	1.61	9.91
1931 ..	8.32	9.47	8.14	8.49	8.51	9.15	14.12	4.09	8.67
1932 ..	8.27	9.29	8.35	8.58	8.54	8.90	14.85	3.25	8.63
1933 ..	8.58	9.59	8.84	8.44	8.64	9.60	12.55	(c)4.19	8.92
1934 ..	8.95	10.19	8.57	9.26	9.23	10.23	12.16	(c)3.29	9.32
1935 ..	9.28	10.03	9.16	8.83	9.25	10.25	13.72	(c)4.21	9.46
1936 ..	9.14	10.16	8.78	9.30	9.40	10.33	11.42	(c)4.27	9.43
1937 ..	9.36	10.03	9.10	8.91	8.95	9.51	11.64	(c)3.85	9.44
1938 ..	9.59	10.15	9.19	9.35	9.20	9.71	12.05	5.39	9.64
1939 ..	9.76	10.72	9.40	9.63	9.32	10.19	13.99	3.67	9.93
1940 ..	9.42	10.66	8.98	9.54	9.59	9.94	10.43	6.12	9.72
1941—									
Male ..	10.83	11.31	10.31	11.37	11.87	11.26	12.87	6.18	11.0
Female ..	8.67	9.90	8.02	9.58	8.37	10.24	9.78	4.36	9.0
Total ..	9.75	10.59	9.21	10.47	10.19	10.76	12.03	5.35	12.0

(a) Number of deaths per 1,000 of annual mean population. (b) Part of New South Wales prior to 1911. (c) Revised rates based on mean population adjusted in accordance with the results of Census of 30th June, 1938. See footnote (c) to table on p. 263.

3. Standardized Death-Rates.—(i) General. The death-rates quoted above are crude rates, i.e., they simply show the number of deaths per thousand of mean population without taking into consideration differences in the sex and age composition of the population. Other conditions being equal, however, the crude death-rate of a community will be low if it contains a large percentage of young people (not infants), and conversely the crude death-rate will be relatively high if the population includes a large proportion

of elderly people. The foregoing table of crude death-rates, therefore, does not indicate comparative incidence of mortality either as between States in the same year or in any one State over a period of years. In order to obtain a comparison of mortality rates on a uniform basis as far as sex and age constitution are concerned, "standardized" death-rates may be computed. These are computed by selecting a particular distribution of age and sex as a standard, and then calculating what would have been the general death-rate if the death-rates in each sex and age group were as recorded, but the age and sex distribution the same as in the standard population. For the standardized rates which follow, the standard population compiled by the International Institute of Statistics has been used. This standard is based upon the age distribution according to sex of nineteen European countries at their Censuses nearest to the year 1900. Full details of the "Standard Population" are given in Official Year Book No. 22, p. 962.

(ii) *Death-rates in Age-Groups.* The following table provides a comparison of death-rates in age-groups in each State for the latest Census year (1933) in which the ages of population in each State were accurately ascertained.

DEATH-RATES(a) IN AGE-GROUPS, 1933.

Age-group.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Aust.
Under 1 ..	41.03	43.52	45.64	34.04	38.25	43.28	75.27	43.48	41.72
1-4 ..	3.70	3.78	4.29	2.72	3.46	3.99	2.73	1.23	3.72
5-14 ..	1.08	1.21	1.24	0.96	1.31	1.67	..	0.55	1.16
15-24 ..	1.74	1.82	2.01	1.72	1.69	2.41	4.34	0.68	1.82
25-34 ..	2.50	2.76	3.10	2.65	2.99	3.47	4.30	0.63	2.74
35-44 ..	4.27	4.02	5.06	3.76	4.76	4.98	7.94	4.49	4.32
45-54 ..	8.43	8.10	8.69	7.27	10.03	8.11	9.71	6.19	8.36
55-64 ..	18.07	18.88	18.09	15.99	19.34	15.80	30.15	11.19	18.15
65 and over	64.78	62.85	66.87	61.18	60.49	65.43	77.47	40.91	63.85
Crude Death rate (all ages) ..	8.58	9.59	8.84	8.44	8.64	9.60	12.55	4.19	8.92

(a) Number of deaths per 1,000 of mean population at ages shown.

It will be observed that in this particular year while the crude death-rates for Victoria and Tasmania were substantially higher than in other States the rates at individual ages were lower than for Queensland and not appreciably higher than in New South Wales or Western Australia.

(iii) *Comparison of Crude and Standardized Death-rates.* The relative incidence of mortality as between individual States and as between the years 1921 and 1933 is illustrated in the following statement of crude and "standardized" death-rates. These years have been chosen for comparison because the Census data give essential information as to sexes and ages of the State population. Crude death-rates are shown to indicate the degree to which they disguise the true position.

CRUDE AND STANDARDIZED DEATH-RATES 1921 AND 1933.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Aust.
Crude Death-rate(a)—							
1921 .. ..	9.50	10.52	9.37	10.02	10.42	10.30	9.91
1933 .. ..	8.58	9.59	8.84	8.44	8.64	9.60	8.92
Standardized Death-rate(b)—							
1921 .. ..	10.35	10.79	10.24	10.38	11.88	10.83	10.58
1933 .. ..	8.52	8.74	9.10	7.66	8.74	8.86	8.62

(a) Total deaths per 1,000 of mean population.  
in par. 3 (i) above.

(b) See explanation of standardized death-rates



The above comparisons relate to individual years which happened to be Census years and should not be used as the bases for general conclusions as to changes in incidence of mortality except for those years.

(iv) *Standardized Death-rates, Australia, 1933 to 1941.* It is not possible to continue the Index of Mortality formerly published. As indicated in letterpress previously published the Index of Mortality was an unsatisfactory basis for comparison. The more reliable Standardized Death-rates for 1933 and later years for Australia were as follows:—1933, 8.62; 1934, 8.92; 1935, 8.83; 1936, 8.70; 1937, 8.58; 1938, 8.59; 1939, 8.73, 1940, 8.51, and 1941, 8.55.

4. *Crude Death-rates of Various Countries.*—The following table gives the crude death-rate for Australia in comparison with the rates for various other countries:—

#### CRUDE DEATH-RATES(a) : VARIOUS COUNTRIES.

Country.	1908-13.	1940.	Country.	1908-13.	1940.
Queensland.. ..	10.3	9.0	Greece .. ..	(b)	13.0(d)
New Zealand .. ..	9.3	9.2	Italy .. ..	20.4	13.6
Union of South Africa (Europeans) .. ..	(b)	9.4	Poland .. ..	21.0	13.8(c)
New South Wales ..	10.3	9.4	Great Britain and Northern Ireland ..	14.5	13.9
South Australia ..	10.1	9.5	Eire .. ..	16.9	14.2
Western Australia ..	10.3	9.6	England and Wales ..	14.1	14.3
<b>Australia</b> .. ..	<b>10.7</b>	<b>9.7</b>	Hungary .. ..	(b)	14.4
Netherlands .. ..	13.9	9.9	Northern Ireland ..	16.9	14.6
Tasmania .. ..	10.7	9.9	Finland .. ..	16.4	14.8
Denmark .. ..	13.2	10.4	Scotland .. ..	15.5	14.9
Norway .. ..	13.6	10.7	Belgium .. ..	15.7	16.1
Victoria .. ..	11.7	10.7	Spain .. ..	22.8	16.3
U.S. of America ..	(b)	10.8	Japan .. ..	20.5	17.6(c)
Argentina .. ..	17.5	11.3	France .. ..	18.6	18.2(e)
Sweden .. ..	14.0	11.4	Rumania .. ..	24.7	19.2
Switzerland .. ..	15.2	12.1	Ceylon .. ..	31.4	20.6
Germany .. ..	16.5	12.7	Egypt .. ..	25.8	26.4(c)
Czechoslovakia ..	21.0	12.8(c)			

(a) Number of deaths per 1,000 of mean population.

(b) Not available.

(c) For 1938.

(d) For 1939.

(e) Excludes Alsace-Lorraine.

5. *Infantile Deaths and Death-rates.*—(i) *Australia, 1901 to 1941.* The universal experience that during the first few years of life the higher death-rate of male infants tends to counteract the excess of male births is confirmed by the fact that out of 319,406 male infants born from 1937 to 1941, 13,749 (43.05 per 1,000) died during the first year of life, while of 303,903 female infants only 10,289 (33.86 per 1,000) died during the first year. Still-births are not included in any of the tables relating to deaths.

#### INFANTILE DEATHS AND DEATH-RATES : AUSTRALIA.

Year.	Registered deaths under one year.			Rate of Infantile Mortality.(a)		
	Males.	Females.	Total.	Males.	Females.	Total.
1901 ..	5,888	4,778	10,666	112.13	94.73	103.61
1911 ..	4,745	3,624	8,369	75.91	60.72	68.49
1921 ..	5,111	3,841	8,952	72.97	58.06	65.73
1931 ..	2,889	2,105	4,994	47.34	36.62	42.14
1937 ..	2,565	1,969	4,534	42.11	33.82	38.06
1938 ..	2,684	1,923	4,607	43.37	32.86	38.26
1939 ..	2,711	1,987	4,698	43.00	33.21	38.23
1940 ..	2,766	2,089	4,855	42.82	33.83	38.43
1941 ..	3,023	2,321	5,344	43.84	35.40	39.72

(a) Number of deaths under 1 year per 1,000 live births registered.

(ii) *States, 1901 to 1941.* For each State and Territory the rates of infantile mortality during the period 1901 to 1941 were as follows:—

#### INFANTILE MORTALITY RATES.(a)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Aust.
1901-05..	97.02	95.91	94.35	86.70	124.79	90.00	149.35	(b)	96.91
1906-10..	77.30	79.90	71.27	68.38	89.80	83.18	143.79	(b)	77.61
1911-15..	71.05	72.23	65.68	67.26	72.43	70.91	85.11	32.56	70.32
1916-20..	64.82	67.18	63.04	61.93	61.73	63.84	67.15	40.40	64.67
1921-25..	58.11	61.93	50.99	54.19	59.14	60.44	40.82	60.24	57.88
1926-30..	54.74	52.34	47.41	46.95	49.27	53.37	66.09	71.31	51.99
1931-35..	41.92	42.76	39.46	35.12	40.81	44.47	80.60	(c)34.48	41.27
1936-40..	41.18	37.63	36.75	33.08	39.70	41.23	44.80	21.78	38.81
1937 ..	40.68	36.70	35.64	33.06	37.52	41.73	30.30	14.49	38.06
1938 ..	41.84	34.21	41.28	30.50	33.80	39.74	58.82	40.00	38.26
1939 ..	41.02	35.58	35.48	34.93	40.84	40.57	57.97	23.90	38.23
1940 ..	39.02	39.45	35.32	35.54	44.18	35.24	46.24	10.49	38.43
1941 ..	43.77	36.21	39.13	32.47	35.28	48.98	83.33	16.39	39.72

(a) Number of deaths under 1 year per 1,000 live births registered. (b) Part of New South Wales prior to 1911. (c) Based on deaths of infants born in the Australian Capital Territory.

#### INFANTILE MORTALITY RATES : UNDER ONE MONTH AND UNDER ONE YEAR

State.	Under one month.				One month and under one year.			
	1911-15.	1921-25.	1931-35.	1941.	1911-15.	1921-25.	1931-35.	1941.
New South Wales	31.75	29.97	27.64	29.52	39.30	28.14	14.28	14.25
Victoria ..	33.07	32.19	27.76	26.07	39.16	29.74	14.98	10.14
Queensland ..	30.73	27.44	28.02	25.70	34.95	23.55	11.47	13.43
South Australia ..	29.07	27.83	23.00	20.43	38.19	26.36	12.13	12.04
Western Australia	30.87	27.56	25.11	19.07	41.56	31.58	15.68	16.21
Tasmania ..	32.68	31.73	30.07	33.62	38.23	28.71	14.40	15.36
Australia ..	31.69	29.91	27.28	26.63	38.63	27.97	13.99	13.09

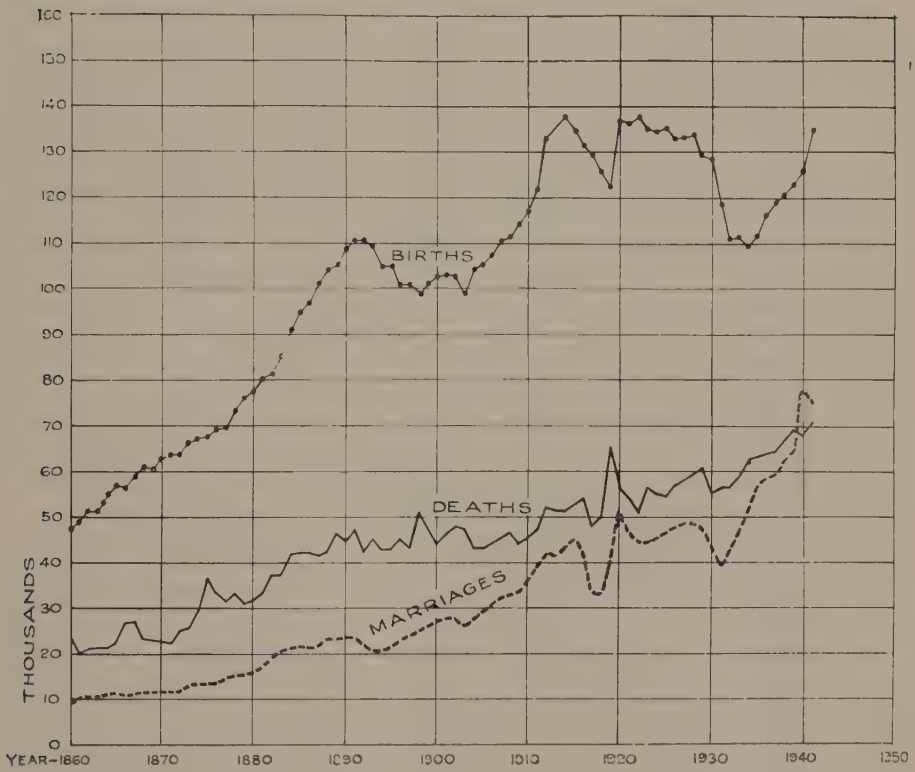
These tables disclose the striking decrease in infantile mortality, the rate for 1941 being much less than half that of 1901-05. The second table reveals the fact that relatively little improvement has taken place in the first month of life, but that the principal decrease has occurred among the older children and has been due to the decline in preventable diseases.

The deaths of infants under one year of age during 1941 numbered 5,344, the mortality rate being 39.72. Among the States, South Australia had the lowest and Tasmania the highest rate.

(iii) *Districts.* The total number of births and of deaths of children under one year of age for 1941 are shown in *Demography Bulletin*, No. 59, for each of the sixty-five districts for which vital statistics have been tabulated.

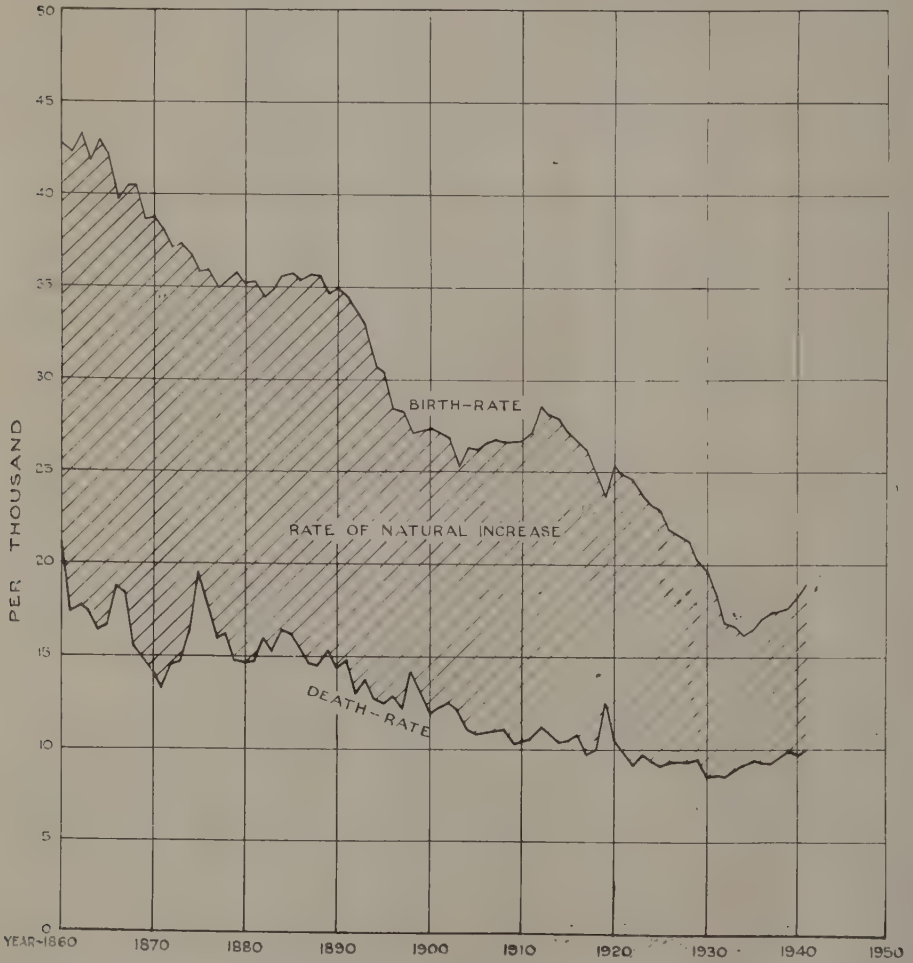
(iv) *Various Countries and Cities.* Compared with other countries the States of Australia occupy a very favourable position. In 1940, the latest year for which comparable figures are available, all Australian States with the exception of Western Australia had lower rates than for any other country save New Zealand. The rates for the Netherlands and for Sweden were, however, lower than that for Western Australia. In 1939 the Australian cities Melbourne, Brisbane and Adelaide were among the ten cities having the lowest rates in the list shown on the next page. The list is headed by Oslo (28), Auckland (29), and Amsterdam (29), the next seven cities being San Francisco, Stockholm, Melbourne, Chicago, Copenhagen, ~~Brisbane~~ and Adelaide. The highest rate recorded of the cities named in the table was 238 in Madras. A study of the respective rates shows

BIRTHS, DEATHS, AND MARRIAGES—AUSTRALIA, 1860 TO 1941.



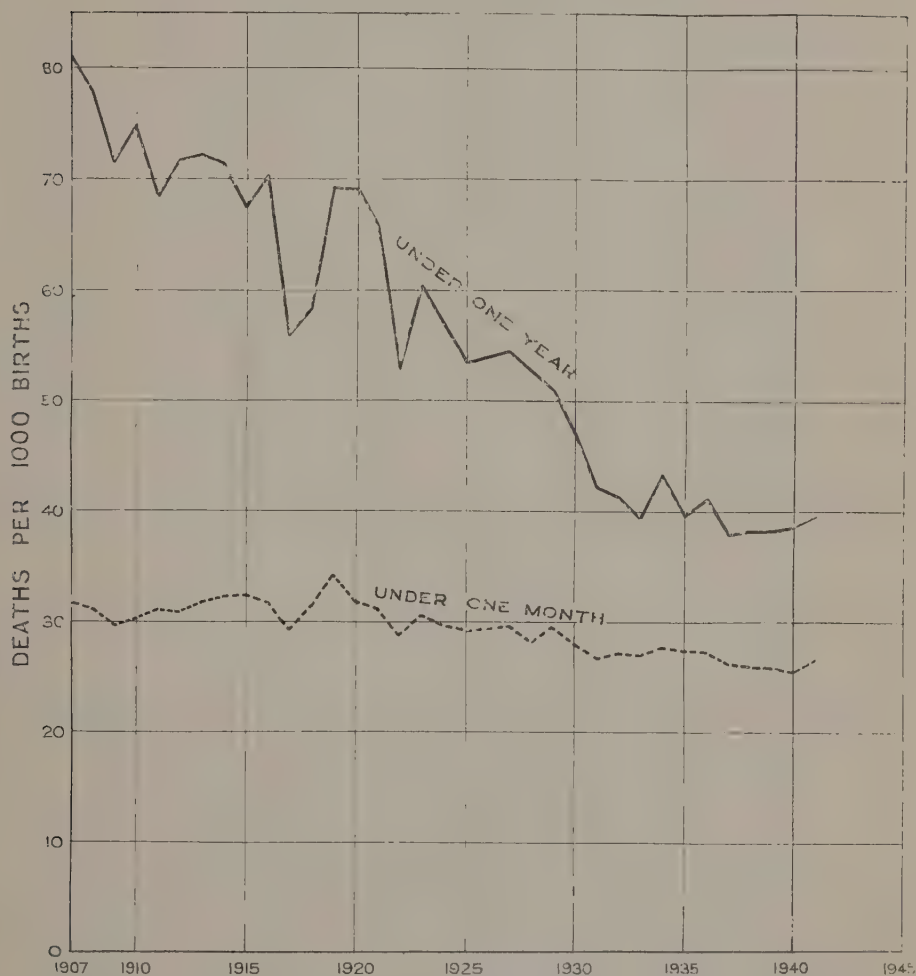


RATES OF BIRTHS, DEATHS, AND NATURAL INCREASE--AUSTRALIA, 1860 TO 1941.



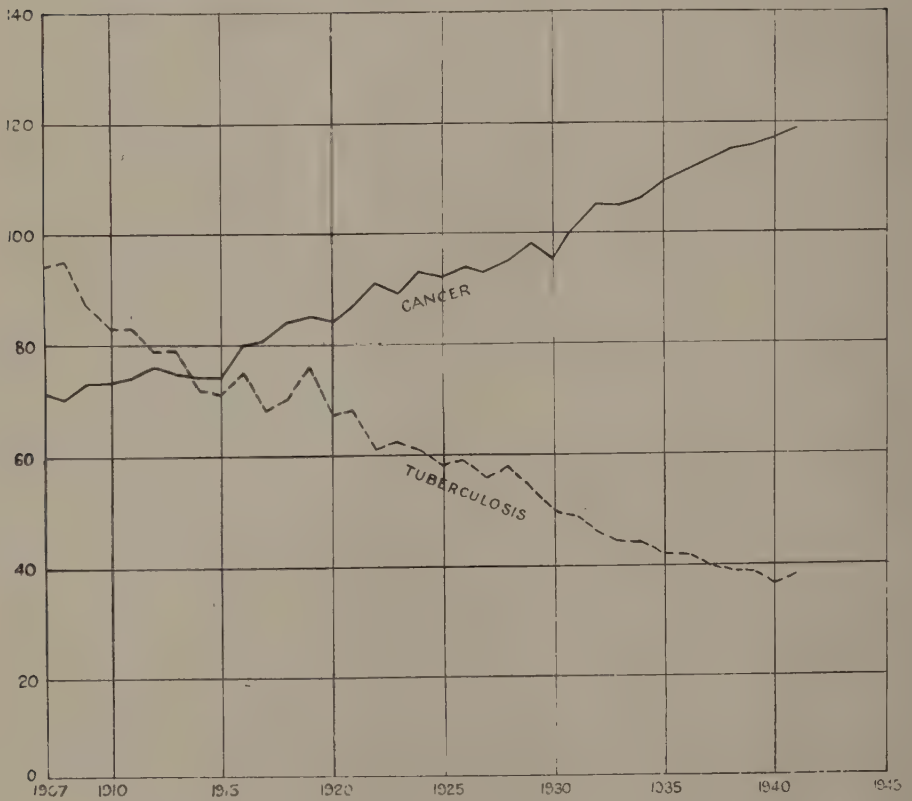
EXPLANATION.—The upper curve represents the number of births per 1,000 persons, while the lower curve represents the corresponding death-rate. The distance between the two curves is the rate of natural increase.

# INFANTILE MORTALITY RATES -AUSTRALIA, 1907 TO 1941.



EXPLANATION.—This graph shows the marked improvement in infantile mortality rates over the past 34 years. The improvement has been confined mainly to children over one month, very little change having occurred in the first month of life (see page 334).

## DEATH-RATES—CANCER AND TUBERCULOSIS—AUSTRALIA, 1907 TO 1941.



(See page 360.)

EXPLANATION.—The vertical scale represents the number of deaths per 100,000 of the population.



that a high birth-rate is often, though not invariably, accompanied by a high infantile death-rate :—

### INFANTILE MORTALITY RATES(a) : VARIOUS COUNTRIES.

Country.	Infantile Mortality Rate. (a)		Crude Birth-rate, (b) 1940.	Country.	Infantile Mortality Rate. (a)		Crude Birth-rate, (b) 1940.
	1906-15.	1940.			1906-15.	1940.	
New Zealand ..	61	30	22.6	Great Britain and Nthn. Ireland..	(c)	59	15.0
Tasmania ..	77	35	20.8	Germany ..	168	63	20.0
Queensland ..	68	35	19.9	Eire ..	92	65	19.1
South Australia ..	68	36	16.7	Scotland ..	113	78	17.1
<b>Australia ..</b>	<b>74</b>	<b>38</b>	<b>18.0</b>	Northern Ireland	92	86	19.6
New South Wales	74	39	17.8	Finland ..	(c)	88	17.9
Victoria ..	76	39	16.8	Belgium ..	139	89	13.4
Netherlands ..	115	39	20.8	France..	122	91	14.6
Sweden ..	74	39	15.0	Czechoslovakia ..	(c)	92	16.8(d)
Western Australia	81	44	19.5	Italy ..	144	104	23.4
Switzerland ..	108	46	15.2	Spain ..	156	109	24.0
U.S. of America..	(c)	46	17.9	Japan ..	151	114(d)	27.0(d)
Union of South Africa (Europeans) ..	(c)	50(e)	25.3(e)	Portugal ..	(c)	126	24.8
Denmark ..	103	50	18.3	Hungary ..	(c)	134	19.9
England and Wales	113	55	14.6	Ceylon ..	(c)	149	35.8
Canada ..	(c)	56	21.4	Egypt ..	(c)	163(d)	43.4(d)
				Rumania ..	(c)	189	26.5

(a) Number of deaths under 1 year per 1,000 births registered.  
mean population.

(c) Not available.

(d) For year 1938.

(b) Number of births per 1,000  
(e) For year 1939.

### INFANTILE MORTALITY RATES(a) : VARIOUS CITIES.

City.	Rate of Infantile Mortality.(a)		City.	Rate of Infantile Mortality.(a)	
	1921.	1939.		1921.	1939.
Oslo ..	54	28	Cape Town ..	82	49
Auckland ..	54	29	Hamburg ..	95	50(b)
Amsterdam ..	54	29	Leipzig ..	136	50(b)
San Francisco ..	50	30	Antwerp ..	98	50
Stockholm ..	61	31	Johannesburg	101	52
Melbourne ..	74	32	Leeds ..	98	57
Chicago ..	84	32	Berlin ..	135	58(b)
Copenhagen ..	67	34	Breslau ..	170	58(b)
Brisbane ..	62	34	Birmingham	82	59
Adelaide ..	74	35	Paris ..	95	61
Sydney ..	62	35	Manchester ..	94	61
Wellington ..	61	36	Munich ..	126	64(b)
New York City	72	37	Cologne ..	140	66(b)
Perth ..	81	38	Montreal ..	158	70
Detroit ..	83	40	Liverpool ..	105	71
Christchurch ..	54	42	Rome ..	..	79(b)
Philadelphia ..	78	42	Edinburgh ..	96	81
Toronto ..	91	43	Belfast ..	115	85
Geneva ..	..	43	Glasgow ..	106	86
Los Angeles ..	68	45	Dublin ..	123	90
Hobart ..	75	47	Aberdeen ..	108	95
Sheffield ..	99	47	Lisbon ..	..	133
London ..	80	47	Cairo ..	..	191
Dresden ..	115	48(b)	Bombay ..	402	213
Washington ..	83	48	Madras ..	281	238

(a) Number of deaths under 1 year per 1,000 births registered.

(b) For year 1938.

## CAUSES OF DEATHS OF CHILDREN UNDER ONE YEAR : AUSTRALIA, 1941.

Age at Death.	Measles.	Whooping Cough.	Diphtheria.	Erysipelas.	Meningococcal Meningitis.	Respiratory Tuberculosis.	Tubercular Meningitis.	Tuberculosis, other forms.	Syphilis.	Meningitis.	Convulsions.	Acute Bronchitis.
Under 1 week ..	..	..	..	..	..	..	..	..	1	2	5	1
1 week and under 2 weeks ..	..	..	..	1	1	..	..	..	..	1	2	..
2 weeks ..	..	1	..	..	2	..	..	..	..	1	..	..
3 ..	..	3	..	1	..	..	..	..	..	..	2	1
1 month ..	..	20	1	..	3	1	..	..	3	6	1	1
2 months ..	..	26	..	..	4	..	..	..	3	3	1	2
3 ..	..	28	..	1	1	..	..	..	2	4	5	1
4 ..	..	18	..	..	1	..	4	1	1	1	..	1
5 ..	..	14	1	..	2	..	1	1	..	1	2	2
6 ..	..	13	..	..	..	..	..	..	..	1	2	2
7 ..	1	13	2	..	3	..	4	1	..	3	1	1
8 ..	..	10	4	..	..	..	1	3	1	4	2	..
9 ..	..	8	2	..	1	..	1	1	..	4	1	1
10 ..	..	7	2	1	2	1	2	..	..	5	1	..
11 ..	1	12	2	..	..	2	..	..	..	3	2	2
Total under 1 year ..	2	171	17	5	21	6	14	7	12	40	23	15
Infantile Mortality (a)—												
1911 ..	0.34	1.57	0.25	0.16	..	0.08	0.31	0.22	0.85	1.83	2.55	2.34
1921 ..	0.15	1.97	0.59	0.24	0.03	0.07	0.18	0.08	0.56	1.10	1.45	1.50
1931 ..	0.10	1.58	0.25	0.11	0.08	0.03	0.22	0.04	0.20	0.32	0.39	0.32
1941 ..	0.01	1.27	0.13	0.04	0.16	0.04	0.10	0.05	0.09	0.30	0.17	0.11
Ex-nuptial deaths under 1 year included in above, 1941	..	10	..	1	2	..	1	1	4	1	2	..
Infantile Mortality (b)—												
1925 ..	0.16	3.06	0.32	0.16	0.48	..	0.32	..	1.27	0.32	2.38	0.48
1931 ..	0.51	1.71	0.34	..	0.17	..	0.34	..	0.51	..	0.51	0.86
1941 ..	..	1.94	..	0.19	0.39	..	0.19	0.19	0.77	0.19	0.39	..

Age at Death.	Broncho-Pneumonia.	Pneumonia.	Other Diseases of the Stomach.	Diarrhoea and Enteritis.	Hernia and Intestinal Obstruction.	Malformation.	Congenital Debility.(c)	Premature Birth.	Injury at Birth.	Icterus, Sclerema and other Diseases of Early Infancy.	Other Causes.	Total.
Under 1 week ..	22	21	..	4	3	274	149	1,428	507	449	48	2,914
1 week and under 2 weeks	13	7	1	4	2	62	24	109	34	53	11	325
2 weeks ..	18	0	..	10	1	32	14	54	19	15	21	190
3 ..	22	12	..	8	1	27	14	23	6	7	17	144
1 month ..	53	20	1	31	3	66	17	41	5	17	55	345
2 months ..	42	16	..	29	1	36	13	7	2	5	27	210
3 ..	37	16	1	23	1	31	11	2	..	..	37	194
4 ..	26	12	1	18	2	25	9	2	..	3	34	162
5 ..	25	13	..	19	3	21	4	..	1	..	35	144
6 ..	33	10	..	24	5	11	3	2	..	2	21	138
7 ..	27	11	..	21	2	11	1	..	..	3	31	133
8 ..	25	15	1	26	..	11	1	1	..	1	27	137
9 ..	19	0	..	16	1	5	2	1	..	1	18	90
10 ..	19	7	1	18	..	8	..	..	..	..	20	94
11 ..	17	7	1	25	1	3	2	..	..	1	25	100
Total under 1 year ..	398	191	7	279	26	623	266	1,670	574	557	420	5,344
Infantile Mortality (a)—												
1911 ..	2.86	1.90	0.47	16.99	0.72	2.99	22.41	..	4.07	5.58	68.40	..
1921 ..	3.08	2.08	0.71	15.01	0.57	3.74	7.64	15.29	5.53	4.16	65.73	..
1931 ..	2.82	1.62	0.13	3.26	0.41	4.23	2.60	14.04	2.81	3.29	3.29	42.14
1941 ..	2.96	1.42	0.05	2.07	0.19	4.63	1.98	12.41	4.27	4.14	3.13	39.72
Ex-nuptial deaths under 1 year included in above, 1941	21	12	1	22	2	21	18	93	27	23	39	304
Infantile Mortality (b)—												
1925 ..	8.09	2.38	1.11	19.18	0.47	3.64	9.51	20.93	1.90	2.69	6.98	84.83
1931 ..	5.31	3.43	0.34	8.39	0.17	4.28	7.19	21.92	3.08	3.77	5.82	68.65
1941 ..	4.65	2.32	0.19	4.26	0.39	4.06	3.48	18.00	5.23	4.45	7.55	58.83

(a) Rate per 1,000 total births.  
and Sclerema prior to 1931.

(b) Rate per 1,000 ex-nuptial births.

(c) Includes Icterus

(v) *Causes of Deaths of Children under one Year.* The preceding table gives for twenty-three causes the ages of all children who died under one year of age during 1941. The infantile mortality rates for 1911, 1921, 1931 and 1941 have been added for all births, and for 1925, 1931 and 1941 for ex-nuptial births. Particulars for males and females for 1941 appear in *Demography Bulletin*, No. 59.

Pre-natal influences, such as malformation, congenital debility and premature birth, together with injuries at birth, accounted for 3,690 or 69 per cent. of all deaths under one year; and of these 3,690 deaths, 2,807 or 76 per cent., occurred less than a week after birth. Among the survivors of the first week, broncho-pneumonia caused the greatest number of deaths. This disease was responsible for 398 deaths, representing 7 per cent. of all deaths under one year, or 2.96 per 1,000 births. Diarrhœa and enteritis caused 279 deaths, pneumonia of unspecified nature 191 deaths and whooping cough 171 deaths.

(vi) *Deaths of Ex-nuptial Children under one Year.* The deaths of ex-nuptial children were tabulated by this Bureau for the first time in 1925. The causes of death of these children in 1941 and the rates in respect of 1925, 1931 and 1941 are shown as an addendum to the preceding table.

Pre-natal influences such as malformation, congenital debility, premature birth and injuries at birth accounted for 182, or 60 per cent., broncho-pneumonia for 24, or 8 per cent., and diarrhœa and enteritis for 22, or 7 per cent., of the total deaths of ex-nuptial children under 1 year.

6. *Deaths in Age-groups.*—A distribution into age-groups has been made of the 339,654 deaths which aggregated in Australia during the five years ended 1941, and the results are shown in the following table.

A table giving the corresponding percentages for earlier periods from the year 1901 has been added to show the movement over a longer term. The most striking change is the substantial decrease in the group "under 1 year". At the other end of the table, the group "65 years and over" has increased by a similar amount. The percentages in all age-groups under 40 have fallen and those in all age-groups from 40 onwards have risen. These changes are due partly to improvement in the efficiency of medical science and partly to changes in the age distribution of the population. The latter changes are themselves in part due to increased length of life made possible by medical science and in part to changes in the volume of migration and the falling birth-rate:—

#### AGGREGATE DEATHS IN AGE-GROUPS : AUSTRALIA, 1937 TO 1941.

Age-group.	Males.	Females.	Total.	Percentage of Total Males.	Percentage of Total Females.	Percentage of Total.
				%	%	%
Under 1 year ..	13,749	10,289	24,038	7.23	6.88	7.08
1 year and under 5 ..	3,993	3,238	7,231	2.10	2.17	2.13
5 years " 20 ..	6,660	4,470	11,130	3.50	2.99	3.28
20 " " 40 ..	15,301	12,911	28,212	8.05	8.64	8.31
40 " " 60 ..	40,854	27,762	68,616	21.48	18.57	20.20
60 " " 65 ..	17,199	11,353	28,552	9.05	7.59	8.40
65 " over ..	92,328	79,481	171,809	48.56	53.16	50.58
Age unspecified ..	62	4	66	0.03	..	0.02
<b>Total ..</b>	<b>190,146</b>	<b>149,508</b>	<b>339,654</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>



## DEATHS IN AGE-GROUPS : PERCENTAGES, AUSTRALIA.

Age-group. (Years.)	Males.			Females.			Persons.		
	1901-10.	1916-20.	1921-30.	1901-10.	1916-20.	1921-30.	1901-10.	1916-20.	1921-30.
	%	%	%	%	%	%	%	%	%
Under 1 ..	19.80	15.16	13.18	21.47	15.27	12.98	20.51	15.20	13.10
1-4 ..	5.84	5.61	4.35	7.28	6.58	4.72	6.45	6.03	4.51
5-19 ..	5.84	5.18	4.86	7.08	5.73	4.85	6.37	5.42	4.85
20-39 ..	13.85	13.57	11.00	16.54	16.34	13.59	14.99	14.76	12.12
40-59 ..	19.70	22.55	21.76	15.67	18.41	18.96	17.99	20.77	20.55
60-64 ..	5.71	7.58	9.01	4.77	5.86	7.27	5.31	6.84	8.26
65 and over ..	29.08	30.18	35.71	27.15	31.77	37.61	28.26	30.86	36.53
Age unspecified ..	0.18	0.17	0.13	0.04	0.04	0.02	0.12	0.12	0.08
Total ..	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

7. Deaths at Single Ages and in Age-Groups.—(i) *General.* The 71,176 deaths registered in Australia in 1941 will be found tabulated in groups of five years for each State and Territory and in single ages for Australia in *Demography Bulletin* No. 59. The deaths during the first fifteen years of life have been tabulated in single ages and for the first year of life in shorter periods. A summary for Australia is given in the following table:—

## DEATHS AT SINGLE AGES AND IN AGE-GROUPS : AUSTRALIA, 1941.

Ages.	Males.	Fe- males.	Total.	Ages.	Males.	Fe- males.	Total.
Under 1 week ..	1,678	1,236	2,914	Total 5-9 years ..	375	267	642
1 week and under 2 ..	180	145	325	" 10-14 " ..	331	216	547
2 weeks and under 3 ..	104	95	199	" 15-19 " ..	510	329	839
3 weeks and under 1 month ..	77	67	144	" 20-24 " ..	629	465	1,094
Total under 1 month	2,039	1,543	3,582	" 25-29 " ..	611	613	1,224
1 month and under 3 ..	320	244	564	" 30-34 " ..	665	632	1,297
3 months and under 6 ..	288	212	500	" 35-39 " ..	884	745	1,629
6 months and under 12	376	322	698	" 40-44 " ..	1,087	869	1,956
Total under 1 year ..	3,023	2,321	5,344	" 45-49 " ..	1,629	1,290	2,919
1 year and under 2 ..	383	288	671	" 50-54 " ..	2,456	1,624	4,080
2 years ..	189	154	343	" 55-59 " ..	3,079	1,886	4,965
3 " ..	146	108	254	" 60-64 " ..	3,720	2,465	6,185
4 " ..	124	80	204	" 65-69 " ..	4,183	3,020	7,203
Total under 5 years	3,865	2,951	6,816	" 70-74 " ..	4,840	3,913	8,753
				" 75-79 " ..	4,806	4,328	9,134
				" 80-84 " ..	3,526	3,481	7,007
				" 85-89 " ..	1,655	1,842	3,497
				" 90-94 " ..	440	637	1,077
				" 95-99 " ..	96	178	274
				" 100 and over ..	18	16	34
				Age Unspecified ..	4	..	4
				Total All Ages ..	39,409	31,767	71,176

(ii) *Rates.* The following table gives the average annual death-rates per 1,000 living in age-groups for the period 1932 to 1934, i.e., the Census year 1933 and the years immediately preceding and following. Deaths in the Northern Territory and the Australian Capital Territory are included in the total for Australia but not in any of the States. Similar details for the years 1920 to 1922 are given in Official Year Book, No. 22, p. 975.

## AVERAGE ANNUAL DEATH-RATES : AGE-GROUPS, 1932 TO 1934.

Age-group.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
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## MALES.

Years.							
0-4 ..	12.51	12.65	12.21	9.91	12.81	12.77	12.33
5-9 ..	1.41	1.72	1.56	1.21	1.56	2.08	1.53
10-14 ..	1.23	1.38	1.08	1.04	1.40	1.27	1.24
15-19 ..	1.69	1.76	1.93	1.71	1.76	2.05	1.76
20-24 ..	2.28	2.31	2.81	2.31	2.52	2.73	2.41
25-29 ..	2.21	2.58	2.93	2.50	2.85	2.98	2.52
30-34 ..	2.81	2.82	3.50	2.53	3.10	3.78	2.96
35-39 ..	3.76	3.85	4.61	3.26	4.01	4.71	3.92
40-44 ..	5.34	4.93	6.04	4.71	5.69	4.85	5.28
45-49 ..	7.91	7.61	7.98	6.80	8.81	6.90	7.76
50-54 ..	11.62	11.25	11.82	9.81	13.48	9.96	11.45
55-59 ..	17.70	18.68	17.58	15.15	21.43	14.47	17.89
60-64 ..	25.74	26.66	26.92	25.08	28.26	23.92	26.27
65-69 ..	39.99	41.17	39.94	36.14	42.40	35.11	40.03
70-74 ..	62.28	63.96	58.90	57.29	63.40	59.22	61.85
75-79 ..	95.52	98.12	94.59	92.66	105.14	94.23	96.26
80-84 ..	156.44	157.81	168.61	146.83	176.82	160.80	158.70
85-89 ..	231.04	233.33	218.42	239.45	264.96	204.45	230.75
90 and over	313.38	348.76	314.86	303.07	380.77	401.97	327.55

## FEMALES.

Years.							
0-4 ..	10.05	7.04	10.72	8.30	8.64	10.42	10.00
5-9 ..	1.17	1.30	1.03	1.03	1.27	1.54	1.19
10-14 ..	0.83	0.97	0.93	0.90	0.99	0.91	0.90
15-19 ..	1.36	1.39	1.50	1.23	1.26	2.22	1.39
20-24 ..	2.03	2.00	2.77	2.35	1.94	2.58	2.11
25-29 ..	2.44	2.50	2.81	2.74	2.75	3.74	2.60
30-34 ..	2.88	2.87	3.44	2.64	3.13	3.63	2.97
35-39 ..	3.75	3.37	4.05	3.88	4.24	4.43	3.74
40-44 ..	4.24	4.32	4.89	4.10	5.79	4.88	4.37
45-49 ..	6.02	6.11	6.14	5.78	6.35	5.44	6.03
50-54 ..	8.27	8.81	8.61	8.07	9.08	10.08	8.56
55-59 ..	11.62	12.49	12.02	11.26	10.69	11.62	15.54
60-64 ..	17.27	18.73	17.19	17.78	17.32	16.87	17.77
65-69 ..	29.55	29.91	27.01	27.13	29.81	30.46	29.21
70-74 ..	45.95	48.18	49.03	42.31	44.10	48.31	46.70
75-79 ..	74.78	81.13	76.29	75.65	74.42	83.58	77.47
80-84 ..	125.55	127.91	126.63	120.74	120.99	125.15	125.68
85-89 ..	119.40	204.57	208.19	207.40	192.39	195.28	199.94
90 and over	292.10	327.19	370.23	233.58	397.20	363.63	306.24

AVERAGE ANNUAL DEATH-RATES: AGE-GROUPS, 1932 TO 1934—*continued*.

Age-group.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia
PERSONS.							
Years.							
0-4 ..	11.31	11.37	11.48	9.12	11.35	11.62	11.19
5-9 ..	1.29	1.51	1.30	1.12	1.41	1.81	1.36
10-14 ..	1.03	1.18	1.01	0.97	1.20	1.09	1.07
15-19 ..	1.52	1.57	1.72	1.47	1.51	2.14	1.58
20-24 ..	2.16	2.16	2.60	2.35	2.24	2.66	2.26
25-29 ..	2.32	2.54	2.87	2.61	2.80	3.35	2.56
30-34 ..	2.85	2.85	3.47	2.59	3.12	3.71	2.96
35-39 ..	3.76	3.61	4.34	3.57	4.12	4.56	3.83
40-44 ..	4.79	4.62	5.50	4.40	5.15	4.86	4.83
45-49 ..	6.99	6.84	7.14	6.29	7.67	6.19	6.92
50-54 ..	10.00	10.00	10.37	8.93	11.47	10.02	10.04
55-59 ..	14.70	15.46	14.86	13.19	16.63	13.09	14.88
60-64 ..	21.56	22.46	22.41	21.35	23.44	20.52	22.04
65-69 ..	34.90	35.29	34.06	31.39	37.01	32.87	34.69
70-74 ..	54.31	55.68	54.55	49.43	55.28	53.89	54.38
75-79 ..	85.18	89.06	86.33	83.92	91.08	88.97	86.82
80-84 ..	140.43	140.48	148.56	132.56	149.72	142.64	141.13
85-89 ..	209.89	215.56	213.10	220.66	222.90	199.07	214.17
90 and over	301.13	334.60	341.25	253.61	389.21	376.36	314.41

8. Deaths of Centenarians.—In previous years, up to and including Year Book No. 33, particulars are given concerning persons aged 100 years and upwards who died each year. However, while the Registrars-General of the various States verify the ages as far as possible, absolute reliance cannot be placed on their accuracy, owing to the well-known tendency of very old people to overstate their ages, and it is considered advisable to discontinue publication of this table. In connexion with this question it may be noted that while parish registers in the United Kingdom often date very far back, compulsory registration of births dates practically from 1874 only, the Act of 1836 having left many loopholes for those unwilling to register the births of their children.

9. Length of Residence in Australia of Persons who Died.—The length of residence in Australia of all persons whose deaths were registered in 1940 is shown in the following table:—

## LENGTH OF RESIDENCE IN AUSTRALIA OF PERSONS WHO DIED IN 1940.

Length of Residence.	Male Deaths.	Female Deaths.	Total Deaths.	Length of Residence.	Male Deaths.	Female Deaths.	Total Deaths.
Born in Australia ..	28,139	23,178	51,317	Resident 25 to 29 years ..	1,090	712	1,802
Resident under 1 year ..	54	25	79	" 30 to 34 ..	796	371	1,167
" 1 year ..	31	28	59	" 35 to 39 ..	320	159	479
" 2 years ..	26	16	42	" 40 to 44 ..	538	232	770
" 3 ..	21	20	41	" 45 to 49 ..	393	213	606
" 4 ..	13	12	25	" 50 to 54 ..	1,321	793	2,114
" 5 ..	16	14	30	" 55 to 59 ..	1,100	761	1,861
" 6 ..	25	5	30	" 60 to 64 ..	871	644	1,515
" 7 ..	11	9	20	" 65 yrs. and over ..	1,112	1,275	2,387
" 8 ..	18	9	27	Length of residence not stated ..	..	..	..
" 9 ..	11	5	16				
" 10 to 14 years ..	386	247	633				
" 15 to 19 ..	530	301	831				
" 20 to 24 ..	295	275	570	Total ..	38,608	29,776	68,384

10. Birthplaces of Persons who Died.—The table giving a summary of birthplaces of persons whose deaths were registered in 1911 and 1940 will be found in the Official Year Book No. 34, p. 337. More detailed information in respect of 1940 will be found in *Demography Bulletin*, No. 58.

11. Occupations of Males who Died.—Information as to the main groups of the occupations of the 39,409 males who died in Australia in 1941 is contained in the following table. Corresponding data for 1921 and 1931 have been added for purposes of comparison.



## OCCUPATIONS OF MALES WHO DIED : AUSTRALIA.

Occupation Group.	Number of Male Deaths.			Percentage of Total.		
	1921.	1931.	1941.	1921.	1931.	1941.
				%	%	%
Professional .. ..	1,307	1,534	(a)3,872	4.26	4.82	(a) 9.83
Domestic .. ..	830	846	955	2.71	2.66	2.42
Commercial .. ..	2,739	3,727	3,554	8.94	11.72	9.02
Transport and Communica- tion .. ..	1,841	2,189	2,692	6.01	6.89	6.83
Industrial .. ..	8,613	10,330	7,235	28.10	32.49	18.36
Agricultural, Pastoral and Mining, &c. .. ..	5,711	6,157	7,854	18.63	19.36	19.93
Indefinite .. ..	1,436	1,802	613,247	{ 4.68	5.67	} b33.61
Dependent .. ..	8,175	5,211				
Total Male Deaths ..	30,652	31,796	39,409	100.00	100.00	100.00

(a) 731 (1.85 per cent.) clerks, etc., not specified as belonging to any industry, formerly included under "Commercial" are included under "Professional". (b) 5,772 (14.65 per cent.) labourers, not specified as belonging to any industry formerly included under "Industrial" are included under "Indefinite".

12. Causes of Death.—(i) *General*. The classification adopted by this Bureau is that of the International Institute of Statistics, as amended by the Committees of Revision which met in Paris in 1909, 1920, 1929 and 1938.

(ii) *Mortality Statistics for 1907 and Subsequent Years*. The statistics relating to causes of death in Australia from 1907 onward have been tabulated in this Bureau in accordance with the above-mentioned classification, and the system is being employed also in the State statistical offices. Particulars for the year 1941 have been tabulated on the 1938 revision of the International List.

(iii) *Classification of Causes of Death, according to the Intermediate and the Abridged International Classifications*. An abridged classification, which enumerates forty-three diseases and groups of diseases according to the revised classification, has been in use in many European countries and American States until recently, and a table has been given in past issues of the Official Year Book showing the causes of death according to the abridged classification, so that the results may be compared with those of other countries which used the abridged index.

As the result of an international treaty signed in London in 1934, the intermediate classification of causes of death, or the "minimum nomenclature" covering 87 main causes or groups of causes, has now been adopted in most countries for the purpose of making international comparisons. This classification appears in the pages following and shows the number of deaths during 1941 in Australia for each cause enumerated. To preserve continuity with former statistics, particulars for 1941 have been compiled in the abridged form and are shown on p. 352 in conjunction with those for the previous four years, and averages over quinquennial periods to 1936-40 are shown in the same form on p. 353.

The compilations for the years 1937 to 1941 will be found in full detail in *Demography Bulletins*, Nos. 55 to 59. In the following tables in which the intermediate classification has been employed, tables A, B and C show deaths of males, females and persons for the year 1941. Table D shows in the abridged form, on the basis of the 1938 revision of the International List, the number of persons who died in each of the years 1937 to 1941 and gives the rate per million of population for the last-named year.

Since death-rates are subject to continual fluctuation, it is unsafe to base deductions on the figures relating to a single year. In order, therefore, to furnish a valid basis for comparison, three quinquennial periods have been shown in table E giving the number of deaths and the rates per million persons. While the absolute number of deaths has increased, the death-rate has shown a very satisfactory decrease, which is reflected in the great majority of the causes specified in the table.

## A.—CAUSES OF DEATH : MALES, 1941.

## INTERMEDIATE CLASSIFICATION.

(Figures in parentheses indicate the abridged classification number in each instance.)

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	N.T.	A. C. T.	Aust.
1. Typhoid and Paratyphoid Fevers (1) .. ..	1, 2	6	..	3	..	1	2	..	..	12
2. Plague (2) .. ..	3	..	..	..	..	..	..	..	..	..
3. Scarlet Fever (3) .. ..	8	..	5	2	..	..	..	..	..	7
4. Whooping Cough (4) .. ..	9	59	7	30	2	1	11	..	..	110
5. Diphtheria (5) .. ..	10	60	47	16	17	9	15	..	..	164
6. Tuberculosis of the Respiratory System (6) .. ..	13	630	469	202	112	135	52	2	..	1,602
7a. Tubercular Meningitis (7a) ..	14 (a)	10	10	6	2	2	3	..	..	33
7b. Other forms of Tuberculosis (7b) .. ..	14 (b)—22	23	40	5	6	13	3	..	..	90
8. Septicæmia, Purulent Infection (Non-puerperal) (14) .. ..	24	12	17	9	3	4	2	..	..	47
9. Dysentery (14) .. ..	27	15	4	11	3	1	..	..	..	34
10. Malaria (8) .. ..	28	2	2	1	..	..	..	..	..	5
11. Syphilis (9) .. ..	30	106	103	51	27	37	16	2	..	342
12a. Influenza—Pneumonic (10a) ..	33 (a)	33	15	29	4	12	4	..	..	97
12b. Influenza—Other (10b) .. ..	33 (b)	29	13	9	4	10	1	..	..	66
13. Small-pox (11) .. ..	34	..	..	..	..	..	..	..	..	..
14. Measles (12) .. ..	35	5	1	5	..	..	..	..	..	11
15. Typhus Fever (13) .. ..	39	..	..	4	..	2	..	..	..	6
16. Diseases caused by Helminths (14)	40—42	7	10	1	2	2	1	..	..	23
17. Other Infectious and Parasitic Diseases (14) .. ..	*	119	78	41	29	59	12	2	..	340
18. Cancer of the Buccal Cavity and Pharynx (15) .. ..	45	100	80	58	34	30	9	..	..	311
19. Cancer of the Digestive Organs and Peritoneum (15) .. ..	46	933	733	282	173	184	88	4	2	2,399
20. Cancer of the Respiratory System (15) .. ..	47	145	105	38	21	29	11	..	..	349
22. Cancer of the Breast (15) .. ..	50	3	2	1	..	2	1	..	..	9
23. Cancer of Other or Unspecified Organs (15) .. ..	49, 51—55	446	339	162	107	90	43	..	..	1,187
24. Non-malignant Tumours or Tumours of Unspecified Nature (16) .. ..	56, 57	65	56	28	12	10	2	1	..	174
25. Acute Rheumatic Fever (20) .. ..	58	28	15	10	10	15	2	1	..	81
26. Chronic Rheumatism and Gout (17) .. ..	59, 60	13	13	6	13	4	2	1	..	52
27. Diabetes Mellitus (18) .. ..	61	174	151	68	64	30	15	1	..	503
28. Diseases of the Thyroid and Parathyroid Glands (20) .. ..	63	20	16	2	8	3	1	..	..	50
29. Other General Diseases (20) .. ..	62, 64—66	20	21	7	3	2	1	..	..	54
30. Avitaminoses (20) .. ..	67—71	3	1	1	..	1	2	..	..	8
31. Anæmias (20) .. ..	73	36	30	13	9	11	3	..	..	102
32. Leucæmias, Pseudoleucæmias, and other Diseases of the Blood and Blood-making Organs (20)	72, 74—76	67	47	29	7	8	7	2	..	167
33. Alcoholism (acute or chronic) (19)	77	30	11	13	8	5	1	..	..	68
34. Other Chronic Poisonings (20) ..	78, 79	4	..	8	1	1	..	..	..	14
35. Meningitis (Non-meningococcal) (21) .. ..	81	56	28	19	8	14	2	1	..	128
36. Diseases of the Spinal Cord (21) ..	82	39	34	9	15	4	3	1	..	105
37. Intra-cranial Lesions of Vascular Origin (22) .. ..	83	1,074	713	375	252	198	80	2	2	2,696
38. Mental Diseases and Deficiency (23) .. ..	84	27	6	12	12	3	..	..	..	60
39. Epilepsy (23) .. ..	85	45	17	17	11	4	4	1	1	100
40. Other Diseases of the Nervous System (23) .. ..	80, 86, 87	88	50	47	28	13	9	..	..	235
41. Diseases of the Eye, Ear and their Annexa (23) .. ..	88, 89	10	17	8	5	1	1	..	..	42
42. Pericarditis (24) .. ..	90	14	6	4	3	..	2	..	..	29
43. Chronic Affections of the Valves and Endocardium (24) .. ..	92	307	292	149	89	54	47	1	5	944
44. Diseases of the Myocardium (24) ..	93	2,659	1,591	815	450	353	175	6	5	6,054
45. Diseases of the Coronary Arteries and Angina Pectoris (24) .. ..	94	1,364	877	413	286	208	79	1	6	3,234
46. Other Diseases of the Heart (24) ..	91, 95	272	201	98	58	44	25	1	..	699

\* No. 17 :—4-7, 11, 12, 23, 25, 26, 29, 31, 32, 36—38, 43, 44.

A.—CAUSES OF DEATH: MALES, 1941—*continued*.

## INTERMEDIATE CLASSIFICATION.

(Figures in parentheses indicate the abridged classification number in each instance.)

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S.Aus.	W. Aus.	Tas.	Nor. Ter.	A. C. T.	Aus- tralia
47. Arteriosclerosis and Gangrene (25)	97, 98	242	260	48	53	66	45	1	..	715
48. Other Diseases of the Circulatory System (25)	96, 99- 103	63	44	52	24	18	8	..	..	209
49a. Acute Bronchitis (26a)	106 (a) (c)	56	11	18	11	11	8	..	..	115
49b. Chronic Bronchitis (26b)	106 (b) (d)	100	85	37	44	27	16	2	..	311
50. Pneumonia and Broncho- pneumonia (27)	107-109	741	749	304	247	200	79	9	4	2,333
51. Pleurisy (28)	110	28	37	9	15	6	4	..	..	99
52. Other Diseases of the Respiratory System (except Tuberculosis) (28)	104, 105, 111-114	163	126	97	69	54	22	..	..	531
53. Ulcer of the Stomach and Duodenum (32b)	117	163	155	73	38	23	11	3	..	466
54. Diarrhoea and Enteritis (under 2 years of age) (29a)	119	129	21	21	11	34	..	1	..	217
55. Diarrhoea and Enteritis (2 years and over) (29b)	120	55	27	26	11	18	9	..	..	146
56. Appendicitis (30)	121	125	90	50	13	21	4	1	1	305
57. Hernia, Intestinal Obstruction (32a)	122	117	87	54	32	28	7	1	..	326
58. Cirrhosis of the Liver (31a)	124	88	65	34	15	7	8	..	..	217
59. Other Diseases of the Liver and Biliary Passages, including Biliary Calculi (31b)	125-127	56	38	28	14	13	5	..	..	154
60. Other Diseases of the Digestive System (32b)	*	91	54	45	27	26	8	..	..	251
61. Nephritis (33)	130-132	758	699	330	150	102	86	4	1	2,130
62. Other Diseases of the Kidneys and Ureters (34)	133	52	39	32	6	12	5	..	..	146
63. Calculi of the Urinary Passages (34)	134	29	22	11	5	6	2	..	..	75
64. Diseases of the Urinary Bladder (34)	135	16	20	10	6	8	4	..	..	64
65. Diseases of the Urethra, Urinary Abscess, etc. (34)	136	8	1	2	4	5	2	..	..	22
66. Diseases of the Prostate (34)	137	198	202	101	57	40	38	..	..	636
67. Diseases of the Genital Organs, not specified as Venereal (34)	138, 139	1	..	..	..	1	..	..	..	2
73. Diseases of the Skin and Cellular Tissue (37)	151-153	30	16	13	8	12	2	..	..	81
74. Diseases of the Bones and Organs of Locomotion (except Tuberculosis and Rheumatism) (37)	154-156	26	14	10	5	11	1	..	1	68
75. Congenital Malformations (Stillbirths not included) (38)	157	154	94	75	28	31	13	..	..	395
76. Congenital Debility (38)	158	71	31	18	9	19	11	..	..	159
77. Premature Birth (38)	159	395	232	134	63	64	43	3	2	936
78. Injury at Birth (38)	160	137	97	53	19	14	20	..	..	340
79. Other Diseases Peculiar to the First Year of Life (38)	161	130	99	41	19	12	21	..	..	322
80. Senility (39)	162	533	287	189	158	122	31	4	5	1,329
81. Suicide (40)	163, 164	184	108	80	37	35	15	4	..	463
82. Homicide (41)	165-168	12	4	9	1	2	1	1	..	30
83. Automobile Accidents (42)	170	324	305	107	71	70	33	3	2	915
84. Other Violent or Accidental Deaths (43)	169, 171- 195	725	435	303	173	158	65	15	6	1,880
85. Deaths due to Operations of War (43)	196, 197	..	..	..	2	..	..	..	..	2
86. Legal Executions (43)	198	..	..	..	..	..	..	..	..	..
87. Ill-defined or Unspecified (44)	199, 200	51	29	23	56	3	..	13	1	176
Total Males	..	15,209	10,856	5,554	3,399	2,888	1,364	95	44	39,409

\* No. 60:—115, 116, 118, 123, 128, 129.



## B.—CAUSES OF DEATH : FEMALES, 1941.

## INTERMEDIATE CLASSIFICATION.

(Figures in parentheses indicate the abridged classification number in each instance.)

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	N.T.	A. C. T.	Aust.
1. Typhoid and Paratyphoid Fevers (1) .. .. .	1, 2	2	1	..	..	..	..	..	..	3
2. Plague (2) .. .. .	3	..	..	..	..	..	..	..	..	..
3. Scarlet Fever (3) .. .. .	8	6	10	..	1	..	1	..	..	18
4. Whooping Cough (4) .. .. .	9	55	7	32	5	..	21	..	1	121
5. Diphtheria (5) .. .. .	10	61	22	13	24	11	10	..	..	141
6. Tuberculosis of the Respiratory System (6) .. .. .	13	304	300	95	93	50	41	1	1	888
7a. Tubercular Meningitis (7a) .. .. .	14(a)	9	15	..	2	2	3	..	..	31
7b. Other Forms of Tuberculosis (7b) .. .. .	14b-22	25	42	6	7	5	5	..	..	90
8. Septicæmia, Purulent Infection (Non-puerperal) (14) .. .. .	24	18	11	5	1	2	2	..	..	30
9. Dysentery (14) .. .. .	27	7	..	15	1	3	..	1	..	27
10. Malaria (8) .. .. .	28	..	..	..	..	..	..	..	..	..
11. Syphilis (9) .. .. .	30	25	33	10	7	7	6	..	..	88
12a. Influenza—Pneumonic (8a) .. .. .	33 (a)	50	20	20	1	10	..	..	..	101
12b. Influenza—Other (8b) .. .. .	33 (b)	38	10	12	3	5	4	..	..	81
13. Small-pox (11) .. .. .	34	..	..	..	..	..	..	..	..	..
14. Measles (12) .. .. .	35	3	1	3	1	..	..	..	..	8
15. Typhus Fever (13) .. .. .	39	..	..	..	..	1	..	..	..	1
16. Diseases caused by Helminths (14) .. .. .	40-42	7	7	2	2	1	1	..	..	20
17. Other Infectious and Parasitic Diseases (14) .. .. .	*	69	40	29	14	31	9	3	..	195
18. Cancer of the Buccal Cavity and Pharynx (15) .. .. .	45	21	21	7	2	5	1	..	..	57
19. Cancer of the Digestive Organs and Peritoneum (15) .. .. .	46	704	649	194	178	124	67	..	1	1,917
20. Cancer of the Respiratory System (15) .. .. .	47	33	36	12	20	6	4	..	..	111
21. Cancer of the Uterus (15) .. .. .	48	216	160	60	57	32	27	..	..	561
22. Cancer of the Breast (15) .. .. .	50	287	296	118	94	47	31	..	2	875
23. Cancer of Other or Unspecified Organs (15) .. .. .	49, 51-55	238	243	91	72	35	21	1	1	702
24. Non-malignant Tumours or Tumours of Unspecified Nature (16) .. .. .	56, 57	95	72	44	13	14	4	..	1	243
25. Acute Rheumatic Fever (20) .. .. .	58	38	23	12	8	14	4	..	..	99
26. Chronic Rheumatism and Gout (17) .. .. .	59, 60	39	38	10	17	5	6	..	..	106
27. Diabetes Mellitus (18) .. .. .	61	345	262	110	90	53	23	..	..	883
28. Diseases of the Thyroid and Parathyroid Glands (20) .. .. .	63	98	49	24	10	10	7	..	..	198
29. Other General Diseases (20) .. .. .	62, 64-66	22	17	10	4	8	..	..	..	61
30. Avitaminoses (20) .. .. .	67-71	3	..	1	1	1	..	..	..	6
31. Anæmias (20) .. .. .	73	35	37	18	9	8	3	1	..	111
32. Leucæmias, Pseudoleucæmias, and other Diseases of the Blood and Blood-making Organs (20) .. .. .	72, 74-76	63	48	15	17	7	8	..	1	150
33. Alcoholism (acute or chronic) (19) .. .. .	77	15	2	5	2	1	2	..	..	27
34. Other Chronic Poisonings (20) .. .. .	78, 79	..	1	1	..	..	..	..	..	2
35. Meningitis (Non-meningococcal) (21) .. .. .	81	39	23	14	3	6	3	..	..	88
36. Diseases of the Spinal Cord (21) .. .. .	82	30	14	10	8	5	1	..	..	68
37. Intra-cranial Lesions of Vascular Origin (22) .. .. .	83	1,297	1,197	386	334	219	143	1	4	3,581
38. Mental Diseases and Deficiency (23) .. .. .	84	28	12	10	6	2	4	..	..	62
39. Epilepsy (23) .. .. .	85	27	19	21	9	4	5	..	..	85
40. Other Diseases of the Nervous System (23) .. .. .	80, 86, 87	70	50	34	18	5	4	1	..	182
41. Diseases of the Eye, Ear and their Annexa (23) .. .. .	88, 89	17	9	4	2	1	..	..	..	33
42. Pericarditis (24) .. .. .	90	10	3	1	1	2	..	..	..	17
43. Chronic Affections of the Valves and Endocardium (24) .. .. .	92	308	248	112	78	42	46	..	1	835
44. Diseases of the Myocardium (24) .. .. .	93	2,251	1,488	562	417	244	161	..	2	5,125
45. Diseases of the Coronary Arteries and Angina Pectoris (24) .. .. .	94	713	454	173	151	64	38	..	1	1,594
46. Other Diseases of the Heart (24) .. .. .	91, 95	170	214	73	48	26	23	..	..	554
47. Arteriosclerosis and Gangrene (25) .. .. .	97, 98	203	281	48	57	49	31	..	..	669
48. Other Diseases of the Circulatory System (25) .. .. .	96, 99-103	51	67	30	12	11	8	..	1	180

\* No. 17:—4-7, 11, 12, 23, 25, 26, 29, 31, 32, 36-38, 43, 44.

B.—CAUSES OF DEATH: FEMALES, 1941—*continued.*

## INTERMEDIATE CLASSIFICATION.

(Figures in parentheses indicate the abridged classification number in each instance.)

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	A. C. T.	Aus-tralia.
49a. Acute Bronchitis (26a) ..	106 (a) (c)	39	16	7	12	5	7	..	..	86
49b. Chronic Bronchitis (26b) ..	106 (b) (d)	72	82	39	25	14	7	..	..	239
50. Pneumonia and Bronchopneumonia (27) ..	107-109	634	572	220	164	131	91	3	..	1,815
51. Pleurisy (28) ..	110	13	20	9	6	2	3	..	..	53
52. Other Diseases of the Respiratory System (except Tuberculosis) (28) ..	104, 105, 111-114	122	117	44	68	22	12	..	..	385
53. Ulcer of the Stomach and Duodenum (32b) ..	117	58	45	18	14	6	4	..	..	145
54. Diarrhoea and Enteritis (under 2 years of age) (29a) ..	119	79	26	16	4	46	2	..	..	173
55. Diarrhoea and Enteritis (2 years and over) (29b) ..	120	53	39	22	11	16	4	..	..	145
56. Appendicitis (30) ..	121	63	39	15	13	6	5	1	..	142
57. Hernia, Intestinal Obstruction (32a) ..	122	109	69	48	21	16	12	..	..	275
58. Cirrhosis of the Liver (31a) ..	124	44	45	11	5	8	..	..	1	114
59. Other Diseases of the Liver and Biliary Passages including Biliary Calculi (31b) ..	125-127	108	75	49	37	20	7	..	..	296
60. Other Diseases of the Digestive System (32b) ..	*	87	60	32	17	12	7	..	..	215
61. Nephritis (33) ..	130-132	575	624	262	123	101	67	..	1	1,753
62. Other Diseases of the Kidneys and Ureters (34) ..	133	49	40	13	19	6	2	..	..	129
63. Calculi of the Urinary Passages (34) ..	134	16	11	5	3	1	..	..	..	36
64. Diseases of the Urinary Bladder (34) ..	135	3	6	1	1	2	2	..	..	13
65. Diseases of the Urethra, Urinary Abscess, &c. (34) ..	136	2	..	1	1	..	..	..	..	4
67. Diseases of the Genital Organs not specified as Venereal or connected with Pregnancy &c. (34) ..	138, 139	45	21	17	12	4	5	..	..	104
68. Diseases and Accidents of Pregnancy (36) ..	142-145	36	24	16	14	7	3	..	..	100
69. Abortion, without mention of Infection (36) ..	141	12	4	1	1	1	..	..	..	19
70. Abortion, with mention of Infection (35a) ..	140	35	45	16	4	6	..	..	..	106
71. Infection during Childbirth and the Puerperium (35b) ..	147	39	23	19	3	1	6	..	..	91
72. Other Accidents and Diseases of Childbirth and the Puerperium (36) ..	146, 148-150	82	29	40	8	9	4	1	1	174
73. Diseases of the Skin and Cellular Tissue (37) ..	151-153	36	16	12	6	3	4	..	..	77
74. Diseases of the Bones and Organs of Locomotion (except Tuberculosis and Rheumatism) (37) ..	154-156	15	12	7	8	2	3	..	..	47
75. Congenital Malformations (Stillbirths not included) (38) ..	157	155	63	70	18	22	10	..	1	339
76. Congenital Debility (38) ..	158	59	18	8	4	9	7	2	..	107
77. Premature Birth (38) ..	159	329	176	113	39	41	31	4	1	734
78. Injury at Birth (38) ..	160	90	62	39	18	12	12	2	..	235
79. Other Diseases peculiar to the First Year of Life (38) ..	161	99	55	44	17	9	12	..	..	236
80. Senility (39) ..	162	378	336	133	159	88	60	1	2	1,157
81. Suicide (40) ..	163, 164	63	43	27	14	7	6	..	1	161
82. Homicide (41) ..	165-168	13	7	5	..	2	3	..	..	30
83. Automobile Accidents (42) ..	170	82	91	20	18	27	1	..	..	240
84. Other Violent or Accidental Deaths (43) ..	169, 171-195	253	175	109	78	39	30	1	1	686
85. Deaths due to Operations of War (43) ..	196, 197	..	..	..	..	..	..	..	..	..
86. Legal Executions (43) ..	198	..	..	..	..	..	..	..	..	..
87. Ill-defined or Unspecified (44) ..	199, 200	8	10	7	24	..	1	2	..	52
Total Females ..	..	12,091	9,666	3,976	2,889	1,881	1,211	27	26	31,767

\* No. 60:—115, 116, 118, 123, 128, 129.

## C.—CAUSES OF DEATH : PERSONS, 1941.

## INTERMEDIATE CLASSIFICATION.

(Figures in parentheses indicate the abridged classification number in each instance.)

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	N.T.	A. C. T.	Aust.
1. Typhoid and Paratyphoid Fevers (1) .. .. .	1, 2	8	1	3	..	1	2	..	..	15
2. Plague (2) .. .. .	3	..	..	..	..	..	..	..	..	..
3. Scarlet Fever (3) .. .. .	8	6	15	2	1	..	1	..	..	25
4. Whooping Cough (4) .. .. .	9	114	14	62	7	1	32	..	1	231
5. Diphtheria (5) .. .. .	10	121	69	29	41	20	25	..	..	305
6. Tuberculosis of the Respiratory System (6) .. .. .	13	934	769	297	205	185	96	3	1	2,490
7a. Tubercular Meningitis (7a) .. .. .	14 (a)	19	25	6	4	4	6	..	..	64
7b. Other Forms of Tuberculosis (7b) .. .. .	14 (b)-22	48	82	11	13	18	8	..	..	180
8. Septicæmia Purulent Infection (Non-puerperal) (14) .. .. .	24	30	28	14	4	6	4	..	..	86
9. Dysentery (14) .. .. .	27	22	4	26	4	4	..	1	..	61
10. Malaria (8) .. .. .	28	2	2	1	..	..	..	..	..	5
11. Syphilis (9) .. .. .	30	131	136	61	34	44	22	2	..	430
12a. Influenza (Pneumonic) (8a) .. .. .	33 (a)	83	35	40	5	22	4	..	..	198
12b. Influenza (Other) (8b) .. .. .	33 (b)	67	32	21	7	15	5	..	..	147
13. Small-pox (11) .. .. .	34	..	..	..	..	..	..	..	..	..
14. Measles (12) .. .. .	35	8	2	8	1	..	..	..	..	19
15. Typhus Fever (13) .. .. .	39	..	..	4	..	3	..	..	..	7
16. Diseases caused by Helminths (14) .. .. .	40-42	14	17	3	4	3	2	..	..	43
17. Other Infectious and Parasitic Diseases (14) .. .. .	*	188	118	70	43	90	21	5	..	535
18. Cancer of the Buccal Cavity and Pharynx (15) .. .. .	45	121	101	65	36	35	10	..	..	368
19. Cancer of the Digestive Organs and Peritoneum (15) .. .. .	46	1,637	1,382	476	351	308	155	4	3	4,316
20. Cancer of the Respiratory System (15) .. .. .	47	178	141	50	41	35	15	..	..	460
21. Cancer of the Uterus (15) .. .. .	48	216	160	60	57	32	27	..	..	561
22. Cancer of the Breast (15) .. .. .	50	290	298	119	94	49	32	..	2	884
23. Cancer of other or unspecified Organs (15) .. .. .	49, 51-55	684	582	253	179	125	64	1	1	1,889
24. Non-malignant Tumours or Tumours of Unspecified Nature (16) .. .. .	56, 57	160	128	72	25	24	6	1	1	417
25. Acute Rheumatic Fever (20) .. .. .	58	66	38	22	18	29	6	1	..	180
26. Chronic Rheumatism and Gout (17) .. .. .	59, 60	43	51	16	30	9	8	1	..	158
27. Diabetes Mellitus (18) .. .. .	61	519	413	178	154	83	38	1	..	1,386
28. Diseases of the Thyroid and Parathyroid Glands (20) .. .. .	63	118	65	26	18	13	8	..	..	248
29. Other General Diseases (20) .. .. .	62, 64-66	42	38	17	7	10	1	..	..	115
30. Avitaminoses (20) .. .. .	67-71	6	1	2	1	2	2	..	..	14
31. Anæmias (20) .. .. .	73	71	67	31	18	19	6	1	..	213
32. Leucæmias, Pseudoleucæmias, and other Diseases of the Blood and Blood-making Organs (20) .. .. .	72, 74-76	130	95	44	24	15	15	2	1	326
33. Alcoholism (acute or chronic) (19) .. .. .	77	45	13	18	10	6	3	..	..	95
34. Other Chronic Poisonings (20) .. .. .	78, 79	4	1	9	1	1	..	..	..	16
35. Meningitis (Non-meningococcal) (21) .. .. .	81	95	51	33	11	20	5	1	..	216
36. Diseases of the Spinal Cord (21) .. .. .	82	69	48	19	23	9	4	1	..	173
37. Intra-cranial Lesions of Vascular Origin (22) .. .. .	83	2,371	1,910	761	586	417	223	3	6	6,277
38. Mental Diseases and Deficiency (23) .. .. .	84	55	18	22	18	5	4	..	..	122
39. Epilepsy (23) .. .. .	85	72	36	38	20	8	9	1	1	185
40. Other Diseases of the Nervous System (23) .. .. .	80, 86, 87	158	100	81	46	18	13	1	..	417
41. Diseases of the Eye, Ear and their Annexa (23) .. .. .	88, 89	27	26	12	7	2	1	..	..	75
42. Pericarditis (24) .. .. .	90	24	9	5	4	2	2	..	..	46
43. Chronic Affections of the Valves and Endocardium (24) .. .. .	92	615	540	261	167	96	93	1	6	1,779
44. Diseases of the Myocardium (24) .. .. .	93	4,910	3,079	1,377	867	597	336	6	7	11,179
45. Diseases of the Coronary Arteries and Angina Pectoris (24) .. .. .	94	2,077	1,331	586	437	272	117	1	7	4,828
46. Other Diseases of the Heart (24) .. .. .	91, 95	442	415	171	106	70	48	1	..	1,253
47. Arteriosclerosis and Gangrene (25) .. .. .	97, 98	445	541	96	110	115	76	1	..	1,384
48. Other Diseases of the Circulatory System (25) .. .. .	96, 99-103	114	111	91	36	29	16	..	1	398
49a. Acute Bronchitis (26a) .. .. .	106 (a) (c)	95	27	25	23	16	15	..	..	201

\* No. 17 :—4-7, 11, 12, 23, 25, 26, 29, 31, 32, 36-38, 43, 44.



C.—CAUSES OF DEATH: PERSONS, 1941—*continued.*

## INTERMEDIATE CLASSIFICATION.

(Figures in parentheses indicate the abridged classification number in each instance.)

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	N.T.	A. C. T.	Aust.
49b. Chronic Bronchitis (26b) ..	106 (b) (d)	172	167	76	69	41	23	2	..	550
50. Pneumonia and Broncho-Pneumonia (27) ..	107-109	1,375	1,321	524	411	331	170	12	4	4,148
51. Pleurisy (28) ..	110	41	57	18	21	8	7	..	..	152
52. Other Diseases of the Respiratory System (except Tuberculosis) (28)	104, 105, 111-114	285	243	141	137	76	34	..	..	916
53. Ulcer of the Stomach and Duodenum (32b) ..	117	221	200	91	52	29	15	3	..	611
54. Diarrhoea and Enteritis (under 2 years of age) (29a) ..	119	208	47	37	15	80	2	1	..	390
55. Diarrhoea and Enteritis (2 years and over) (29b) ..	120	108	66	48	22	34	13	..	..	291
56. Appendicitis (30) ..	121	188	129	65	26	27	9	2	1	447
57. Hernia, Intestinal Obstruction (32a) ..	122	226	156	102	53	44	19	1	..	601
58. Cirrhosis of the Liver (31a) ..	124	132	110	45	20	15	8	..	1	331
59. Other Diseases of the Liver and Biliary Passages including Biliary Calculi (31b) ..	125-127	164	113	77	51	33	12	..	..	450
60. Other Diseases of the Digestive System (32b) ..	*	178	114	77	44	38	15	..	..	466
61. Nephritis (33) ..	130-132	1,333	1,323	592	273	203	153	4	2	3,883
62. Other Diseases of the Kidneys and Ureters (34) ..	133	101	79	45	25	18	7	..	..	275
63. Calculi of the Urinary Passages (34) ..	134	45	33	16	8	7	2	..	..	111
64. Diseases of the Urinary Bladder (34) ..	135	19	26	11	7	10	6	..	..	79
65. Diseases of the Urethra, Urinary Abscess, etc. (34) ..	136	10	1	3	5	5	2	..	..	26
66. Diseases of the Prostate (34) ..	137	198	202	101	57	40	38	..	..	636
67. Diseases of the Genital Organs not specified as Venereal or connected with Pregnancy etc. (34)	138, 139	46	21	17	12	5	5	..	..	106
68. Diseases and Accidents of Pregnancy (36) ..	142-145	36	24	16	14	7	3	..	..	100
69. Abortion, without mention of infection (36) ..	141	12	4	1	1	1	..	..	..	19
70. Abortion, with mention of infection (36a) ..	140	35	45	16	4	6	..	..	..	106
71. Infection during Childbirth and the Puerperium (35) ..	147	39	23	19	3	1	6	..	..	91
72. Other Accidents and Diseases of Childbirth and the Puerperium (36) ..	146, 148-150	82	29	40	8	9	4	1	1	174
73. Diseases of the Skin and Cellular Tissue (37) ..	151-153	66	32	25	14	15	6	..	..	158
74. Diseases of the Bones and Organs of Locomotion (except Tuberculosis and Rheumatism) (37)	154-156	41	26	17	13	13	4	..	1	115
75. Congenital Malformations (Stillbirths not included) (38) ..	157	309	157	145	46	53	23	..	1	734
76. Congenital Debility (38) ..	158	130	40	26	13	28	18	2	..	266
77. Premature Birth (38) ..	159	724	408	247	102	105	74	7	3	1,670
78. Injury at Birth (38) ..	160	227	159	92	37	26	32	2	..	575
79. Other Diseases peculiar to the First Year of Life (38) ..	161	229	154	85	36	21	33	..	..	558
80. Senility (39) ..	162	911	623	322	317	210	91	5	7	2,486
81. Suicide (40) ..	163, 164	247	151	107	51	42	21	4	1	624
82. Homicide (41) ..	165-168	25	11	14	1	4	4	1	..	60
83. Automobile Accidents (42) ..	170	406	396	127	89	97	34	4	2	1,155
84. Other Violent or Accidental Deaths (43) ..	169, 171-195	978	610	412	251	197	95	16	7	2,566
85. Deaths due to Operations of War (43) ..	196-197	..	..	..	2	..	..	..	..	2
86. Legal Executions (43) ..	198	..	..	..	..	..	..	..	..	..
87. Ill-defined or Unspecified (44) ..	199, 200	59	39	30	80	3	1	15	1	228
Total ..	..	27,300	20,522	9,530	6,288	4,769	2,575	122	70	71,176

\* No. 60:—115, 116, 118, 123, 128, 129.

## D.—CAUSES OF DEATH : ABRIDGED CLASSIFICATION, AUSTRALIA, 1937 TO 1941.

Abridged Classification.	General Classifi- cation Numbers.	1937.	1938.	1939.	1940.	1941.	1941— Rate per 1,000,000 Population
1. Typhoid and Paratyphoid Fevers .. ..	1, 2	62	48	35	28	15	2
2. Plague .. ..	3	..	..	..	..	..	..
3. Scarlet Fever .. ..	8	33	28	29	34	25	3
4. Whooping Cough .. ..	9	179	144	82	265	231	32
5. Diphtheria .. ..	10	314	308	344	185	305	43
6. Tuberculosis of the Respiratory System ..	13	2,462	2,398	2,458	2,339	2,490	351
7a. Tubercular Meningitis .. ..	14 (a)	104	51	80	79	64	9
7b. Other Tuberculous Diseases .. ..	14b-22	190	177	171	155	180	25
8. Malaria .. ..	28	9	10	21	7	5	1
9. Syphilis .. ..	30	(a) 290	(a) 317	(a) 373	(b) 522	(h) 430	61
10a. Influenza—Pneumonic .. ..	33 (a)	261	443	645	238	198	28
10b. Influenza—Other .. ..	33 (b)	133	180	239	116	147	21
11. Small-pox .. ..	34	..	1	..	..	..	..
12. Measles .. ..	35	18	10	193	126	19	3
13. Typhus Fever .. ..	39	3	5	7	7	7	1
14. Other Infective and Parasitic Diseases ..	*	574	524	453	530	725	102
15. Cancer and other Malignant Tumours ..	45-55	7,091	7,929	8,092	8,214	8,478	1,194
16. Non-malignant Tumours or Tumours of Un- determined Nature* .. ..	56, 57	428	410	448	453	417	59
17. Chronic Rheumatism and Gout .. ..	59, 60	155	174	169	185	158	22
18. Diabetes Mellitus .. ..	61	1,149	1,220	1,258	1,274	1,386	195
19. Chronic or Acute Alcoholism .. ..	77	64	55	72	86	95	13
20. Other General Diseases .. ..	*	1,114	1,235	1,125	1,144	1,112	157
21. Non-meningococcal Meningitis and diseases of the Spinal Cord .. ..	81, 82	323	383	343	375	359	55
22. Intra-cranial Lesions of Vascular Origin ..	83	4,292	5,459	5,538	5,785	6,277	884
23. Other Diseases of Nervous System and Sense Organs .. ..	80, 84-89	793	842	847	791	799	112
24. Diseases of the Heart .. ..	90-95	14,092	15,463	17,278	17,455	19,085	2,687
25. Other Diseases of the Circulatory System ..	96-103	(b) 2,734	(b) 1,938	(b) 1,872	(a) 1,913	(a) 1,782	251
26a. Acute Bronchitis .. ..	106 (a)(c)	172	163	198	189	201	28
26b. Chronic Bronchitis .. ..	106 (b)(d)	500	538	558	524	550	77
27. Pneumonia and Broncho-pneumonia ..	107-109	4,212	4,402	4,127	3,988	4,148	584
28. Other Diseases of the Respiratory System ..	*	957	951	1,028	1,046	1,068	150
29a. Diarrhoea and Enteritis (under two years of age) .. ..	119	331	343	426	397	390	55
29b. Diarrhoea and Enteritis (two years and over) .. ..	120	333	315	306	308	291	41
30. Appendicitis .. ..	121	552	525	560	450	447	63
31a. Cirrhosis of the Liver .. ..	124	281	316	319	301	331	47
31b. Other Diseases of the Liver and Biliary Calculi .. ..	125-127	426	518	488	480	450	63
32a. Hernia, Intestinal Obstruction .. ..	122	635	551	591	583	601	85
32b. Other Diseases of the Digestive System ..	*	980	944	1,016	970	1,077	152
33. Nephritis .. ..	130-132	3,838	3,899	3,909	3,865	3,883	547
34. Other Diseases of the Genito-Urinary System	133-139	1,181	1,248	1,216	1,221	1,233	174
35a. Post-abortive Sepsis .. ..	140	150	144	114	142	106	15
35b. Puerperal Infection .. ..	147	62	63	48	95	91	13
36. Other Diseases of Pregnancy, Childbirth and the Puerperium .. ..	141-146, 148-150	339	355	341	278	293	41
37. Diseases of the Skin, Bones, etc. .. ..	151-156	357	331	319	294	273	38
38. Congenital Debility, Malformations, Prema- ture Birth, etc. .. ..	157-161	3,231	3,274	3,322	3,368	3,803	535
39. Senility .. ..	162	2,919	2,891	2,522	2,541	2,486	350
40. Suicide .. ..	163, 164	721	746	781	743	624	88
41. Homicide .. ..	165-168	107	81	75	99	60	8
42. Automobile Accidents .. ..	170	1,386	1,391	1,405	1,457	1,155	163
43. Other Accidental or Violent Deaths ..	169,	2,552	2,495	3,064	2,501	2,568	362
44. Unstated or Ill-defined Causes .. ..	171-198 199, 200	207	205	239	238	228	32
Total .. ..	..	64,496	66,451	69,147	68,384	71,176	10,022

\* No. 14 :—4-7, 11, 12, 23-27, 29, 31, 32, 36-38, 40-44; No. 20 :—58, 62-76, 78, 79; No. 28 :—104, 105, 110-114; No. 32b :—115-118, 123, 128, 129.

(a) Excludes Aneurysm of the Aorta.

(b) Includes Aneurysm of the Aorta.

NOTE.—All causes of death have been classified in accordance with the 1938 revision of the International List.

## E.—CAUSES OF DEATH : ABRIDGED CLASSIFICATION, AUSTRALIA, NUMBER AND RATES.

Abridged Classification.	General Classification Numbers.	Number of Deaths.			Average Rate per 1,000,000 of Population.		
		1921-25.	1931-35.	1936-40.	1921-25.	1931-35.	1936-40.
1. Typhoid and Paratyphoid Fevers ..	1, 2	1,209	379	231	42	12	7
2. Plague ..	3	72	..	..	3	..	..
3. Scarlet Fever ..	8	235	331	180	8	10	5
4. Whooping Cough ..	9	1,612	1,186	927	57	36	27
5. Diphtheria ..	10	2,565	2,083	1,605	90	63	47
6. Tuberculosis of the Respiratory System ..	13	15,321	13,221	12,194	538	400	354
7a. Tubercular Meningitis ..	14 (a)	876	618	453	31	19	13
7b. Other Tuberculous Diseases ..	14 (b)—22	1,404	1,016	883	49	31	26
8. Malaria ..	28	150	97	58	5	3	2
9. Syphilis ..	30	1,750	1,600	1,828	61	48	53
10a. Influenza—Pneumonic ..	33 (a)	1,808	2,859	1,913	64	86	55
10b. Influenza—Other ..	33 (b)	1,344	1,326	819	47	40	24
11. Small-pox ..	34	4	1	1	..	..	..
12. Measles ..	35	582	391	390	20	12	11
13. Typhus Fever ..	39	4	15	30	..	1	1
14. Other Infective and Parasitic Diseases ..	..	3,063	2,649	2,577	108	80	75
15. Cancer and other Malignant Tumours ..	45-55	25,794	34,825	39,477	906	1,053	1,143
16. Non-malignant Tumours or Tumours of Undetermined Nature ..	56, 57	633	1,817	2,188	22	55	63
17. Chronic Rheumatism and Gout ..	59, 60	862	847	835	30	26	24
18. Diabetes Mellitus ..	61	3,355	5,095	5,953	118	154	173
19. Chronic or Acute Alcoholism ..	77	793	235	331	27	7	10
20. Other General Diseases ..	..	5,355	5,437	5,792	188	164	168
21. Non-meningococcal Meningitis and Diseases of the Spinal Cord ..	81, 82	2,787	1,371	1,773	98	42	51
22. Intra-cranial Lesions of Vascular Origin ..	83	13,637	22,395	26,138	479	676	758
23. Other Diseases of Nervous System and Sense Organs ..	80, 84-89	7,536	4,600	4,127	265	139	120
24. Diseases of the Heart ..	90-95	31,588	60,227	78,670	1,109	1,817	2,282
25. Other Diseases of the Circulatory System ..	96-103	7,191	7,380	10,182	253	223	295
26a. Acute Bronchitis ..	106(a)(c)	1,580	1,078	921	56	33	27
26b. Chronic Bronchitis ..	106(b)(d)	4,053	2,966	2,662	142	90	77
27. Pneumonia and Broncho-pneumonia ..	107-109	18,400	20,157	21,125	646	608	613
28. Other Diseases of the Respiratory System ..	..	5,781	5,045	5,021	203	152	146
29a. Diarrhoea and Enteritis (under two years of age) ..	119	9,866	2,043	1,855	346	62	54
29b. Diarrhoea and Enteritis (two years and over) ..	120	3,144	1,922	1,598	110	58	46
30. Appendicitis ..	121	2,035	2,080	2,641	71	81	77
31a. Cirrhosis of the Liver ..	124	1,531	1,321	1,501	54	40	44
31b. Other Diseases of the Liver and Biliary Calculi ..	125-127	1,796	2,326	2,388	63	70	69
32a. Hernia, Intestinal Obstruction ..	122	2,048	2,792	2,911	93	84	84
32b. Other Diseases of the Digestive System ..	..	4,053	4,404	4,896	142	133	142
33. Nephritis ..	130-132	12,803	17,754	19,206	459	536	557
34. Other Diseases of the Genito-Urinary System ..	133-139	4,140	5,388	6,056	146	163	176
35a. Post-abortive Sepsis ..	140	761	763	763	(a)	23	22
35b. Puerperal Infection ..	147	1,138	466	393	40	14	11
36. Other Diseases of Pregnancy, Childbirth and the Puerperium ..	141-146, 148-150	2,321	1,833	1,671	82	56	48
37. Diseases of the Skin, Bones, etc. ..	151-156	1,556	1,696	1,669	55	51	48
38. Congenital Debility, Malformation, Premature Birth, etc. ..	157-161	21,511	15,009	16,498	755	481	478
39. Senility ..	162	20,129	14,021	13,757	717	424	399
40. Suicide ..	163, 164	3,106	3,688	3,780	109	121	110
41. Homicide ..	165-168	439	530	459	15	16	13
42. Automobile Accidents ..	170	(b)	4,372	6,862	(b)	132	199
43. Other Accidental or Violent Deaths ..	169, 171-198	13,875	11,267	12,998	487	340	377
44. Unstated or Ill-defined Causes ..	199, 200	3,460	1,542	1,224	122	46	33
Total ..	..	271,171	298,262	332,410	9,522	9,011	9,641

\* No. 14 :—4-7, 11, 12, 23-27, 29, 31, 32, 36-38 ; No. 20 :—58, 62-76, 78, 79 ; No. 28 :—104, 105, 110-114 ; No. 32b :—115-118, 123, 128, 129. (a) Not available, included in 35b and 36. (b) Not available, included in 43.

NOTE.—See note on previous page.



13. Deaths from Principal Specific Causes.—(i) *General*. In the preceding tables particulars have been given for each of the causes of death comprising the Intermediate and the Abridged Classifications. The more important of these causes are treated in detail hereunder. The Intermediate Classification number is indicated in parenthesis for each cause or group of causes.

(ii) *Tuberculosis of the Respiratory System* (6). Of the various forms of tuberculosis prevalent in Australia, phthisis, or tuberculosis of the lungs, has attracted the most attention. The close relation, however, between tuberculosis of the lungs and of other parts of the respiratory system renders it desirable that all forms of tuberculosis of the respiratory system should be brought under one head for investigations concerning the age incidence and duration of this disease.

The decline in the toll levied by this disease on the community is plainly disclosed by the table on p. 353, which shows how both the number of deaths and the death-rate have declined since the period 1921–25.

During 1941 there were 2,490 deaths (1,602 males and 888 females) from tuberculosis of the respiratory system, compared with the average of 2,439 for the preceding five years. The deaths in 1941 represented a rate of 351 per million persons living.

(iii) *Tuberculosis of the Meninges* (7a). The number of deaths ascribed to this cause in 1941 was 64, which is below the average of 91 for the preceding five years.

(iv) *Other Forms of Tuberculosis* (7b). The 180 deaths in 1941 comprised the following:—Tuberculosis of other sites of the central nervous system 1; intestines and peritoneum, 36; vertebral column, 47; other bones and joints, 4; skin and sub-cutaneous cellular tissue, 3; lymphatic system, 6; genito-urinary system 17; other organs, 4; and disseminated tuberculosis—acute 56, chronic 4, and unspecified 3.

(v) *All Forms of Tuberculosis* (6, 7)—(a) *General*. The total number of deaths in 1941 was 2,734, namely, 1,725 males and 1,009 females.

(b) *Ages at Death*. The following table shows the ages of these 2,734 persons; comparable figures are also given for the year 1931:—

#### TUBERCULAR DISEASES : DEATHS IN AGE-GROUPS, AUSTRALIA.

Ages.				1931.			1941.		
				Males.	Females.	Total.	Males.	Females.	Total.
Under 5 years	..	..		57	47	104	42	28	70
5 years and under 10	..	..		14	14	28	12	10	22
10	..	15	..	19	20	39	9	16	25
15	..	20	..	45	105	150	30	52	82
20	..	25	..	113	183	296	69	91	160
25	..	30	..	136	199	335	63	132	195
30	..	35	..	191	164	355	125	129	254
35	..	40	..	187	156	343	144	111	255
40	..	45	..	207	102	309	159	79	238
45	..	50	..	197	83	280	180	76	256
50	..	55	..	185	62	247	216	64	280
55	..	60	..	164	57	221	210	52	262
60	..	65	..	128	50	178	187	59	246
65	..	70	..	110	38	148	137	39	176
70	..	75	..	52	31	83	74	41	115
75	..	80	..	27	16	43	48	18	66
80	..	over	..	4	4	8	20	12	32
Total	..	..		1,836	1,331	3,167	1,725	1,009	2,734

(c) *Occupations at Death, Males.* A tabulation of occupations of males who died from tubercular diseases in 1921, 1931 and 1941, together with the percentage which each class bore to the total male deaths from these diseases, is given hereunder :—

**OCCUPATIONS OF MALES WHO DIED FROM TUBERCULAR DISEASES :  
AUSTRALIA.**

Occupation Group.	Number of Male Deaths.			Percentage of Total.		
	1921.	1931.	1941.	1921.	1931.	1941.
Professional .. ..	167	107	204	% 7.69	% 5.83	(a) 11.82
Domestic .. ..	95	64	64	4.38	3.48	3.71
Commercial .. ..	292	270	163	13.45	14.71	9.45
Transport and Communication	165	170	151	7.60	9.26	8.75
Industrial .. ..	784	694	356	36.11	37.80	20.64
Agricultural, Pastoral, Mining etc. .. ..	404	303	259	18.61	16.50	15.02
Indefinite .. ..	80	157	} 6528	{ 3.68	8.55	} 630.61
Dependent .. ..	184	71		{ 8.48	3.87	
Total Male Deaths ..	2,171	1,836	1,725	100.00	100.00	100.00

(a) Approximately 5 per cent. clerks, etc., not specified as belonging to any industry, formerly included under "Commercial", are included under "Professional". (b) Approximately 17 per cent. labourers, not specified as belonging to any industry, formerly included under "Industrial", are included under "Indefinite".

(d) *Length of Residence in Australia.* The length of residence in Australia of persons who died from tubercular diseases in 1941 is given in the next table :—

**LENGTH OF RESIDENCE IN AUSTRALIA OF PERSONS WHO DIED FROM  
TUBERCULAR DISEASES, 1941.**

Length of Residence in Australia.	Male.	Fem.	Total.	Length of Residence in Australia.	Male.	Fem.	Total.
Born in Australia ..	1,363	887	2,250	Resident 10 years & under 15	20	18	38
Resident under 1 year ..	6	1	7	"    15    "    & under 20	33	15	48
"    1 year .. ..	2	1	3	"    20    "    & over ..	219	68	287
"    2 years .. ..	2	1	3	Length of residence not stated	65	11	76
"    3 " .. ..	3	3	6				
"    4 " .. ..	1	..	1				
"    5 " and under 10	11	4	15	Total Deaths ..	1,725	1,009	2,734

(e) *Death-rates.* In order to show the relative occurrence of tuberculosis in each State and Territory and the change in the incidence in recent years the death-rates from tubercular diseases for the years 1931 and 1941 are given in the following table, together with the proportions which deaths from tuberculosis bore to 10,000 deaths from all causes :—

**TUBERCULOSIS (ALL FORMS) : DEATH-RATES (a) AND PROPORTION OF TOTAL  
DEATHS.**

State or Territory.	Death-rates per 100,000 of Mean Population.					
	1931.			1941.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
New South Wales ..	53	37	45	47	24	36
Victoria .. ..	59	51	55	54	37	45
Queensland .. ..	45	28	37	39	21	30
South Australia ..	58	56	57	40	34	37
Western Australia ..	74	40	58	62	25	44
Tasmania .. ..	61	51	56	48	44	46
Northern Territory ..	69	..	44	27	36	30
Australian Capital Territory	21	25	23	..	17	8
Australia .. ..	55	42	49	48	29	39

(a) Number of deaths from tuberculosis per 100,000 of mean population.

**TUBERCULOSIS (ALL FORMS): DEATH-RATES AND PROPORTION OF  
TOTAL DEATHS—continued.**

Proportion per 10,000 Total Deaths.

State or Territory.	1931.			1941.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
New South Wales ..	563	483	528	436	280	367
Victoria ..	572	589	580	478	369	427
Queensland ..	504	417	469	382	257	329
South Australia ..	663	698	679	353	353	353
Western Australia ..	707	590	666	519	303	434
Tasmania ..	604	581	593	425	429	427
Northern Territory ..	323	..	286	211	370	246
Australian Capital Territory	455	714	556	..	385	143
 Australia .. ..	 577	 537	 560	 438	 318	 384

(f) *Death-rates, Various Countries.*—The following comparative table for various countries shows that Australia occupies a very favourable position as regards the death-rate from this disease:—

**TUBERCULOSIS : DEATHS PER 100,000 PERSONS LIVING, VARIOUS COUNTRIES.**

Country.	Year.	Respiratory System.	All Forms.	Country.	Year.	Respiratory System.	All Forms.
Queensland ..	1941	29	30	Belgium ..	1936	56	72
Union of South Africa (Europeans)	1941	(a)	34	Germany ..	1935	62	73
New South Wales ..	1941	33	36	Italy ..	1938	59	80
South Australia ..	1941	34	37	Scotland ..	1940	62	82
Australia ..	1941	35	39	Northern Ireland ..	1939	66	84
New Zealand ..	1939	34	40	Switzerland ..	1939	73	95
Western Australia ..	1941	40	44	Norway ..	1937	78	98
Victoria ..	1941	40	45	Sweden ..	1939	85	103
Tasmania ..	1941	40	46	Spain ..	1935	(a)	107
U.S. of America ..	1940	42	46	Eire ..	1939	89	113
Denmark ..	1936	37	47	France ..	1934	109	126
Netherlands ..	1936	36	50	Greece ..	1936	104	128
Canada ..	1940	41	51	Czechoslovakia ..	1936	114	129
Egypt ..	1936	45	56	Japan ..	1936	105	142
Ceylon ..	1937	55	(a)	Portugal ..	1939	119	144
England and Wales	1938	53	64	Hungary ..	1939	127	152
Great Britain and Northern Ireland	1938	53	64	Poland (b)	1937	135	153
				Finland ..	1937	179	210

(a) Not available.

(b) In towns with over 100,000 inhabitants.

(vi) *Cancer and other Malignant Tumours (18 to 23).*—(a) *General.* The number of deaths from cancer increased continuously to 6,256 in 1929, declined slightly to 6,120 in 1930, but rose again progressively to 8,478 in 1941. Of the deaths registered during 1941, 4,255 were of males, namely, 1,627 in New South Wales, 1,259 in Victoria, 541 in



Queensland, 335 in South Australia, 335 in Western Australia, 152 in Tasmania, 4 in the Northern Territory, and 2 in the Australian Capital Territory; while 4,223 were of females, namely, 1,499 in New South Wales, 1,414 in Victoria, 428 in Queensland, 423 in South Australia, 249 in Western Australia, 151 in Tasmania, 1 in the Northern Territory, and 4 in the Australian Capital Territory.

(b) *Type and Seat of Disease.* Tables showing the type and seat of disease, in conjunction with age and with conjugal condition, of the persons dying from cancer in 1941 will be found in *Demography Bulletin*, No. 59. A summary regarding type and seat of disease for 1941 is given below. It may be pointed out that the significance of the number of deaths shown for the various types of cancer enumerated hereunder is doubtful owing to the fact that in the absence of a post-mortem it is impracticable for the certifying doctor in the majority of cases to make an accurate diagnosis as to type in the detail required for the following classification.

#### DEATHS FROM CANCER : TYPE AND SEAT OF DISEASE, AUSTRALIA, 1941.

Type of Disease.	Males.	Fem.	Persons.	Seat of Disease.	Males.	Fem.	Persons.
Cancer .. ..	318	329	647	Buccal Cavity and Pharynx ..	311	57	368
Carcinoma—				Digestive Organs and Peritoneum—			
Carcinoma Simplex	3,277	3,339	6,616	Stomach and Duodenum ..	1,116	710	1,826
Epithelioma ..	149	78	227	Rectum and Anus ..	235	214	449
Sciirhus ..	3	38	41	Colon ..	298	327	625
Rodent Ulcer ..	39	26	65	Other ..	750	666	1,416
Adeno-Carcinoma	24	38	62	Respiratory Organs	349	111	460
Colloid Carcinoma	4	2	6	Uterus ... ..	..	561	561
Sarcoma—				Other Female Genital Organs ..	..	249	249
Sarcoma ..	162	115	277	Breast .. ..	9	875	884
Myeloma ..	5	3	8	Male Genital Organs	472	..	472
Endothelioma ..	1	3	4	Genito-Urinary Organs ..	205	85	290
Glioma ..	20	16	36	Skin .. ..	195	124	319
Melanoma—				Brain and Nervous System ..	35	29	64
Melanotic Sarcoma	26	8	34	Other or Unspecified Organs ..	280	215	495
Melano-Carcinoma	1	15	16				
Embryonic Tumours—							
Hypernephroma	18	12	30				
Teratoma ..	6	2	8				
Malignant Disease..	202	199	401				
<b>Total Deaths</b>	<b>4,255</b>	<b>4,223</b>	<b>8,478</b>	<b>Total Deaths</b>	<b>4,255</b>	<b>4,223</b>	<b>8,478</b>

(c) *Ages at Death.* The ages of the persons who died from cancer in 1931 and 1941 are given below. Inferences drawn from the great increase in the number of deaths from cancer in 1941 compared with 1931 need qualification in view of the altered age constitution of the population since the earlier year. The number of people reaching the older ages at which cancer risks are greatest has more than doubled in the last twenty years, and it is only in the extreme old age-groups from 70 onwards that the rate of mortality has definitely increased. For groups up to age 70 there has been no increase in mortality rates since 1931. In the higher age-groups the increase in the rate for females has been relatively greater than that in the rate for males. It is also probable

that a proportion of the increased number of deaths recorded from cancer in recent years has been due to more correct diagnosis and certification on the part of medical practitioners rather than to any actual increase in the disease itself.

DEATHS FROM CANCER : AGES, AUSTRALIA.

Ages.	1931.			1941.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 15 years .. ..	25	23	48	21	25	46
15 years and under 20 ..	12	11	23	10	10	20
20 " " 25 ..	12	14	26	15	13	28
25 " " 30 ..	19	13	32	24	22	46
30 " " 35 ..	26	55	81	28	45	73
35 " " 40 ..	59	98	157	56	106	162
40 " " 45 ..	111	173	284	92	193	285
45 " " 50 ..	149	261	410	149	282	431
50 " " 55 ..	261	287	548	316	403	719
55 " " 60 ..	349	344	693	425	435	860
60 " " 65 ..	519	400	919	558	491	1,049
65 " " 70 ..	662	478	1,140	670	558	1,228
70 " " 75 ..	609	410	1,019	753	623	1,376
75 " " 80 ..	397	294	691	676	512	1,188
80 " " 85 ..	187	152	339	331	330	661
85 years and over .. ..	87	92	179	131	175	306
Total Deaths ..	3,484	3,105	6,589	4,255	4,223	8,478

(d) Occupations. A tabulation in summarized form of occupations of the males who died from cancer in 1921, 1931 and 1941, together with the percentage of each class to the total male deaths from this disease, is given hereunder :—

OCCUPATION OF MALES WHO DIED FROM CANCER : AUSTRALIA.

Occupation Group.	Number of Male Deaths.			Percentage in each Group.		
	1921.	1931.	1941.	1921.	1931.	1941.
				%	%	%
Professional .. ..	133	188	(a) 432	5.45	5.40	(a) 10.15
Domestic .. ..	76	97	113	3.11	2.78	2.66
Commercial .. ..	275	446	455	11.27	12.80	10.69
Transport and Communica- tion .. ..	212	295	351	8.69	8.47	8.25
Industrial .. ..	940	1,346	941	38.52	38.63	22.11
Agricultural, Pastoral, Mining, etc. .. ..	639	843	956	26.19	24.20	22.47
Indefinite .. ..	129	130	b1,007	{ 5.29	3.73	}
Dependent .. ..	36	139				
				1.48	3.99	b23.67
Total Male Deaths ..	2,440	3,484	4,255	100.00	100.00	100.00

(a) Approximately 5 per cent. clerks, etc., not specified as belonging to any industry, formerly included under " Commercial ", are included under " Professional ". (b) Approximately 16 per cent. labourers, etc., not specified as belonging to any industry, formerly included under " Industrial ", are included under " Indefinite ".

(e) *Death-rates.* The following table shows the death-rates per 100,000 of mean population from cancer in each State for the years 1931 and 1941. The substantial increase in the death-rate since 1931 is reflected in both sexes and in all States:—

## DEATHS FROM CANCER : RATES (a)

State or Territory.	1931.			1941.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales .. ..	99	95	97	116	108	112
Victoria .. ..	111	106	109	131	145	138
Queensland .. ..	105	77	92	100	97	99
South Australia .. ..	112	124	118	112	140	126
Western Australia .. ..	110	81	97	138	111	125
Tasmania .. ..	100	100	100	126	128	127
Northern Territory .. ..	69	119	87	54	36	49
Australian Capital Territory	21	51	35	28	67	46
Australia .. ..	105	97	101	119	120	119

(a) Number of deaths from cancer per 100,000 of mean population.

(f) *Proportion of Total Deaths.* While the death-rate from all causes has diminished substantially in recent years, the rate from cancer has risen almost continuously, the result being that out of 10,000 deaths from all causes, 1,201 were due to cancer in 1941, as against 693 per 10,000 total deaths in 1931.

## DEATHS FROM CANCER : PROPORTIONS PER 10,000 TOTAL DEATHS.

State or Territory.	1931.			1941.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales .. ..	1,064	1,249	1,146	1,070	1,240	1,145
Victoria .. ..	1,076	1,229	1,147	1,160	1,463	1,303
Queensland .. ..	1,173	1,150	1,164	974	1,212	1,073
South Australia .. ..	1,281	1,560	1,410	986	1,464	1,205
Western Australia .. ..	1,048	1,211	1,106	1,160	1,324	1,225
Tasmania .. ..	997	1,151	1,070	1,114	1,247	1,177
Northern Territory .. ..	323	2,500	571	421	370	410
Australian Capital Territory	455	1,429	833	455	1,538	857
Australia .. ..	1,096	1,254	1,165	1,080	1,329	1,191

(g) *Comparison with Tuberculosis.* In recent years the death-rate from tuberculosis has shown a tendency to decrease, while that from cancer has displayed an almost continuous increase. The table hereunder shows that for each of the periods under review the decline in the death-rate from tuberculosis has been accompanied by an almost equal increase in the rate for cancer. Thus in the forty years comprised in the quinquennial averages shown below the death-rate for tuberculosis declined by 50 while the rate for cancer increased by 56 per 100,000 persons. This equal but opposite tendency may be demonstrated by stating that the death-rate from tuberculosis and cancer combined remains almost constant in each period, the figures being:—1901-05, 152 per 100,000; 1906-10, 145; 1911-15, 152; 1916-20, 154; 1921-25, 153; 1926-30, 152; 1931-35, 150; 1936-40, 154; and 1941, 158.



## TUBERCULOSIS AND CANCER : DEATH-RATES(a), AUSTRALIA.

Period.	Death-rate from Tuberculosis.			Death-rate from Cancer.		
	Males.	Females.	Total.	Males.	Females.	Total.
1901-05 ..	100	77	89	64	61	63
1906-10 ..	81	69	75	71	70	70
1911-15 ..	84	69	77	75	74	75
1916-20 ..	84	59	71	86	80	83
1921-25 ..	71	52	62	93	88	91
1926-30 ..	64	49	57	97	94	95
1931-35 ..	52	37	45	108	102	105
1936-40 ..	47	31	39	116	113	115
1941 ..	48	29	39	119	120	119

(a) Number of deaths per 100,000 of mean population.

(h) *Death-rates, Various Countries.* The following table shows the Australian death-rate from cancer in comparison with those for other countries :—

## CANCER : DEATHS PER 100,000 PERSONS LIVING, VARIOUS COUNTRIES.

Country.	Year.	Rate.	Country.	Year.	Rate.
Ceylon .. ..	1937	10	New Zealand ..	1940	120
Egypt .. ..	1936	26	U.S. of America ..	1940	120
Portugal .. ..	1939	47	Czechoslovakia ..	1936	126
Japan .. ..	1936	48	Eire .. ..	1939	127
Greece .. ..	1936	50	Norway .. ..	1937	131
Spain .. ..	1935	68	Netherlands ..	1936	131
Italy .. ..	1938	86	Sweden .. ..	1937	133
France .. ..	1934	96	Northern Ireland ..	1939	133
Hungary .. ..	1939	96	Germany .. ..	1935	145
Finland .. ..	1936	100	Denmark .. ..	1936	151
Poland (a) ..	1936	104	Switzerland ..	1939	157
Union of South Africa			Scotland .. ..	1938	162
(Europeans) ..	1941	109	Great Britain and		
Belgium .. ..	1936	110	Northern Ireland ..	1938	172
Canada .. ..	1940	117	England and Wales ..	1938	173
Australia .. ..	1941	119			

(a) In towns with over 100,000 inhabitants.

(vii) *Diseases of the Heart* (42 to 46). The number of deaths in 1941 was 19,085, namely, 10,960 males and 8,125 females. Of these deaths, 46 were attributed to pericarditis, 139 to acute bacterial endocarditis, 20 to other acute endocarditis, 305 to aortic valve disease, 743 to mitral valve disease, 105 to aortic and mitral valve disease, 122 to endocarditis not returned as acute or chronic, 504 to other or unspecified valve disease, 187 to acute myocarditis, 164 to chronic rheumatic myocarditis, 9,348 to other myocardial degeneration, 1,480 to myocarditis not returned as acute or chronic, 4,389 to diseases of coronary arteries, 228 to angina pectoris with record of coronary disease, 211 to other angina pectoris, 347 to disordered action of the heart, 114 to cardiac dilatation (cause unspecified), and 633 to heart disease undefined. The sex and territorial distribution of the deaths will be found in the tables on pp. 346 to 351. This class is the largest among causes of death, the death-rate having grown from 1,019 per million in 1911-15 to 2,282 in 1936-40

and 2,687 in 1941. The increase in the number of deaths recorded from heart diseases has been particularly pronounced during the past nine years. The rapid increase in mortality is partly a reflection of the ageing of the population, but has been influenced mainly by improved diagnosis and certification by medical practitioners. Many deaths of elderly people formerly attributed to senility or other indefinite causes are believed to be now more frequently certified as associated with some form of heart disease, usually myocardial degeneration. The improvement in diagnosis has been particularly evident in the case of diseases of the coronary arteries. As a result of a change of classification adopted in 1931, all forms of this disease have been included among heart diseases since that year. Although deaths recorded from coronary diseases were not numerically important in 1931, this type of disease has since become prominent in medical science, and in 1941 the number of deaths assigned to this cause was 4,389, an increase of 3,825, or nearly 700 per cent., since 1931. The death-rates and proportions per 10,000 deaths in 1941 were as follows:—

**DISEASES OF THE HEART: DEATH-RATES<sup>(a)</sup> AND PROPORTION OF  
10,000 TOTAL DEATHS, 1941.**

State or Territory.	Death-rates from Diseases of the Heart.			Proportion of 10,000 Total Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales .. ..	329	248	288	3,036	2,855	2,956
Victoria .. ..	309	246	277	2,733	2,490	2,619
Queensland .. ..	275	186	232	2,603	2,316	2,518
South Australia .. ..	296	231	263	2,607	2,406	2,514
Western Australia .. ..	271	168	222	2,282	2,010	2,174
Tasmania .. ..	271	227	249	2,405	2,213	2,315
Northern Territory .. ..	122	..	89	947	..	738
Australian Capital Territory	225	67	153	3,636	1,538	2,857
<b>Australia .. ..</b>	<b>306</b>	<b>231</b>	<b>269</b>	<b>2,781</b>	<b>2,558</b>	<b>2,682</b>

(a) Number of deaths from diseases of the heart per 100,000 of mean population.

(viii) *Diarrhoea and Enteritis (Children under two years of age)* (54). The number of deaths due to these causes was 390 in 1941, which is an increase of 19 over the average of 371 for the previous five years. During 1941, 6,015 children died before reaching their second birthday, and of these 390, or 6.5 per cent., died from diarrhoea and enteritis. The ages of children dying from these diseases during the first year of life will be found on page 340.

The number of deaths under 2 years of age, due to diarrhoea and enteritis, the death-rates, and proportions of 10,000 deaths for 1911-15, 1921-25, 1931-35, 1936-40, and 1941 are given in the following table. Reference to the last four lines of the table will reveal the very satisfactory decrease in the number of deaths due to these diseases. In view of changed birth-rates, however, the death-rates per 100,000 of mean population are not true measures of changes in the force of mortality. A better measure would be the estimated number of children in every 1,000 born who died from these diseases before reaching their second birthday. The numbers are estimated to be as follows:—

Period—	1911-15	Males, 24.6	Females, 20.9	Total, 22.8
"	1921-25	" 16.5	" 13.3	" 14.9
"	1931-35	" 3.7	" 2.8	" 3.3
"	1936-40	" 3.4	" 2.7	" 3.0

**DIARRHŒA AND ENTERITIS (UNDER 2 YEARS OF AGE) : DEATHS AND DEATH-RATES(a), AUSTRALIA, 1941.**

State.	Number of Deaths from Diarrhœa and Enteritis. (Under 2 years of age.)			Death-rates from Diarrhœa and Enteritis. (Under 2 years of age.)			Proportion of 10,000 Total Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	129	79	208	9	6	7	85	65	76
Victoria ..	21	26	47	2	3	2	19	27	23
Queensland ..	21	16	37	4	3	4	38	40	39
South Australia..	11	4	15	4	1	3	32	14	24
Western Australia	34	46	80	14	21	17	118	245	168
Tasmania ..	..	2	2	..	2	1	..	17	8
Northern Territory	1	..	1	14	..	10	105	..	82
Australia 1941 ..	217	173	390	6	5	6	55	54	55
Annual Average—									
1911-15 ..	1,687	1,354	3,041	68	59	64	569	627	593
1921-25 ..	1,114	859	1,973	38	31	35	362	366	364
1931-35 ..	234	175	409	7	5	6	70	68	69
1936-40 ..	212	159	371	6	5	5	57	54	56

(a) Number of deaths from these diseases per 100,000 of mean population.

(ix) *Puerperal Septicæmia* (including Post-abortive Sepsis, including Criminal Abortion) (70, 71). Deaths from puerperal septicæmia and post-abortive sepsis during 1941, numbered 155, being made up as follows :—Post-abortive sepsis 22, criminal abortion 91, puerperal infections 42. Owing to the change in classification figures prior to 1940 for these particular causes are not entirely on a comparable basis, as it is probable that some of the deaths classified with puerperal septicæmia in earlier years are now included in "other diseases of pregnancy". The death-rate per 1,000 live births during 1941 was 1.15, while corresponding rates for preceding years were :—1932, 2.19; 1933, 2.09; 1934, 2.34; 1935, 2.20; 1936, 2.91; 1937, 1.78; 1938, 1.72; 1939, 1.32; and 1940, 1.67. The rate in 1941 per 1,000 live births of the 64 deaths from puerperal septicæmia, excluding criminal abortion, was 0.47.

(x) *Other Diseases or Accidents of Pregnancy and Labour* (68, 69, 72). The deaths under this heading numbered 374 in 1934; 345 in 1935; 358 in 1936; 339 in 1937; 355 in 1938; 341 in 1939; 304 in 1940; and 335 in 1941. Included in the 335 deaths in 1941 were the following :—Abortion not returned as septic, 12; ectopic gestation, 26; hæmorrhage of pregnancy, 9; toxæmias of pregnancy, 54; other diseases and accidents of pregnancy, 11; puerperal hæmorrhage, 44; puerperal thrombophlebitis, 16; puerperal embolism or sudden death, 33; puerperal toxæmias, 63; other accidents of child-birth, 54 (Cæsarean section, 23; others, 31); other or unspecified conditions of the puerperal state, 13.

(xi) *All Puerperal Causes* (68 to 72). The 490 deaths in 1941 under the preceding two headings, including criminal abortion, correspond to a death-rate of 13.9 per 100,000 females or 29.5 per 100,000 women between the ages of 15 and 45 years. The rate is also equivalent to 3.64 deaths per 1,000 live births. The death-rate may be expressed in other terms by stating that 1 of every 272 women giving birth to a live child in 1941 died from puerperal causes; the corresponding ratios for married women were 1 of every 291, and for single women 1 in every 102. More detailed information will be found in a series of tables in *Demography Bulletin*, No. 59.



The following table shows the death-rate per 1,000 live births from puerperal causes in various countries. Care is needed in comparing the Australian rates with the figures for other countries. In the rates for the States and Australia deaths from criminal abortion have been excluded from puerperal sepsis but included with deaths from other puerperal causes and in the total. Definite information is not available as to the practice in other countries but it is very probable that the rates for many of the countries given hereunder totally exclude deaths from criminal abortion.

**CHILD-BIRTH : DEATHS PER 1,000 LIVE BIRTHS, VARIOUS COUNTRIES.**

Country.	Year.	Rates per 1,000 Live Births from—		
		Puerperal Sepsis.	Other Puerperal Causes.	All Puerperal Causes.
Japan .. ..	1936	0.64	1.67	2.31
Western Australia .. ..	1941	0.20	2.17	2.37
Italy .. ..	1938	0.83	1.60	2.43
Union of South Africa (Europeans) .. ..	1941	0.84	1.65	2.49
Tasmania .. ..	1941	0.38	2.12	2.50
France .. ..	1934	1.00	1.50	2.50
South Australia .. ..	1941	0.27	2.47	2.74
Norway .. ..	1937	1.18	1.65	2.83
New Zealand .. ..	1940	0.83	2.10	2.93
England and Wales (a) ..	1938	0.86	2.11	2.97
Netherlands .. ..	1936	0.99	2.04	3.03
Sweden .. ..	1937	1.52	1.53	3.05
Great Britain and Northern Ireland .. ..	1938	0.90	2.27	3.17
Spain .. ..	1935	2.00	1.40	3.40
Victoria .. ..	1941	0.44	3.19	3.63
<b>Australia .. ..</b>	<b>1941</b>	<b>0.47</b>	<b>3.17</b>	<b>3.64</b>
Switzerland .. ..	1939	1.02	2.65	3.67
Northern Ireland .. ..	1939	0.79	3.01	3.80
United States of America ..	1940	1.50	2.30	3.80
Hungary .. ..	1939	2.11	1.72	3.83
Denmark .. ..	1936	1.30	2.60	3.90
New South Wales .. ..	1941	0.48	3.46	3.94
Canada .. ..	1940	1.10	2.90	4.00
Eire .. ..	1938	0.81	3.30	4.11
Greece .. ..	1936	2.20	2.00	4.20
Portugal .. ..	1939	1.95	2.33	4.28
Queensland .. ..	1941	0.79	3.49	4.28
Belgium .. ..	1936	1.60	3.00	4.60
Germany .. ..	1935	1.99	2.86	4.85
Czechoslovakia .. ..	1936	2.88	2.03	4.91
Scotland .. ..	1936	2.19	3.36	5.55
Egypt (b) .. ..	1936	2.67	7.18	9.85

(a) Rate per 1,000 live and still-births.

(b) Localities having Health Bureaux.

A tabulation of puerperal causes for Australia according to age at death for married and single women separately will also be found in *Demography Bulletin*, No. 59.

The total number of children left by the 440 married mothers who died was 996, an average of 2.3 children per mother.

Twenty-three of the mothers who died had been married less than one year, 57 between one and two years, and 41 between two and three years. The duration of marriage ranged up to 30 years, apart from 2 cases in which the date of marriage was not stated. Tabulations distinguishing the ages at marriage and at death will be found in *Demography Bulletin*, No. 59, which also includes a table showing in combination the duration of marriage and previous issue.

(xii) *Congenital Malformation, Debility and Premature Birth* (75 to 79). The deaths under this heading in 1941 numbered 3,803 of which 3,630 were of children under one year of age. Of all deaths of children under one year of age 69 per cent. was due to these causes. The number of deaths for 1941 is given in the following table:—

**DEATHS FROM CONGENITAL MALFORMATION, DEBILITY, ETC., 1941.**

State or Territory.	Congenital Malformation.			Premature Birth and Injury at Birth.			Congenital Debility and other Diseases peculiar to the First Year of Life.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	156	155	311	531	419	950	200	158	358
Victoria ..	94	63	157	329	238	567	130	73	203
Queensland ..	75	70	145	187	152	339	59	52	111
South Australia ..	28	18	46	82	57	139	28	21	49
Western Australia	31	22	53	78	53	131	31	18	49
Tasmania ..	13	10	23	63	43	106	32	19	51
Northern Territory	..	..	..	3	6	9	..	2	2
Aust. Cap. Terr...	..	1	1	2	1	3	..	..	..
Australia ..	397	339	736	1,275	969	2,244	480	343	823
Number of deaths under one year	347	276	623	1,275	969	2,244	480	343	823
Number of deaths under one year per 1,000 births	5.03	4.21	4.63	18.49	14.77	16.68	6.96	5.23	6.12

(xiii) *Suicide* (81).—(a) *General*. The deaths from suicide rose each year from 533 in 1922 to 943 in 1930, but the number had declined to 754 in 1932. Since the latter year the deaths from this cause have fluctuated as follows:—1933, 790 deaths—633 males and 157 females; 1934, 826—643 males and 183 females; 1935, 791—612 males and 179 females; 1936, 789—611 males and 178 females; 1937, 721—573 males and 148 females; 1938, 746—574 males and 172 females; 1939, 781—602 males and 179 females; and 1940, 743—568 males and 175 females; and 1941, 624—463 males and 161 females.

(b) *Modes Adopted*. The modes adopted by persons who committed suicide in the periods 1931–35, 1940 and 1941 were as follows:—

**SUICIDE : MODES ADOPTED, AUSTRALIA.**

Mode of Death.	Males.			Females.			Persons.		
	Average of 5 years, 1931–35.	1940.	1941.	Average of 5 years, 1931–35.	1940.	1941.	Average of 5 years, 1931–35.	1940.	1941.
Poisoning .. ..	139	112	75	67	62	62	206	174	137
Poisonous gas ..	39	36	54	20	35	20	59	71	74
Hanging or strangulation ..	83	81	60	17	19	24	100	100	84
Drowning .. ..	46	27	43	28	22	27	74	49	70
Firearms and explosives ..	199	216	149	11	13	10	210	229	159
Cutting or piercing instruments .. ..	89	72	57	9	12	10	98	84	67
Jumping from a high place ..	15	10	13	6	6	5	21	16	18
Crushing .. ..	13	10	10	2	3	1	15	13	11
Other modes .. ..	12	4	2	3	3	2	15	7	4
Total .. ..	635	568	463	163	175	161	798	743	624

(c) *Death-rates.* The death-rates from suicide and the proportion per 10,000 of total deaths are given in the following table for each year 1937 to 1941, corresponding rates for the periods 1911-15, 1921-25, 1931-35, and 1936-40, being shown at the foot of the table :—

**SUICIDE : DEATHS, DEATH-RATES, (a) AND PROPORTION OF TOTAL DEATHS,  
1941.**

State or Territory.	Number of Deaths.			Death-rates from Suicide.			Proportion of 10,000 Total Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	184	63	247	13	5	9	121	52	90
Victoria ..	108	43	151	11	4	8	99	44	74
Queensland ..	80	27	107	15	5	10	144	68	112
South Australia ..	37	14	51	12	5	9	109	48	81
Western Australia	35	7	42	14	3	9	121	37	88
Tasmania ..	15	6	21	12	5	9	110	50	82
Northern Territory	4	..	4	54	..	39	421	..	328
Australian Capital Territory ..	..	1	1	..	17	8	..	385	143
Australia, 1941 ..	463	161	624	13	5	9	117	51	88
„ 1940 ..	568	175	743	16	5	11	109	26	73
„ 1939 ..	602	179	781	17	5	11	155	59	113
„ 1938 ..	574	172	746	17	5	11	155	58	112
„ 1937 ..	573	148	721	17	4	11	158	52	112
Average—1936-40	586	170	756	17	5	11	157	56	114
„ 1931-35	635	163	798	19	5	12	190	62	134
„ 1921-25	509	112	621	18	4	11	166	48	114
„ 1911-15	509	115	624	21	5	13	172	53	122

(a) Number of deaths from suicide per 100,000 of mean population.

(d) *Ages.* From the following table, which shows the ages of the persons who committed suicide in 1941, it will be seen that both youth and extreme old age are represented :—

**AGES OF PERSONS WHO COMMITTED SUICIDE : AUSTRALIA, 1941.**

Ages.				Ages.			
	M.	F.	Total.		M.	F.	Total.
10 years and under 15	..	1	1	60 years and under 65	54	13	67
15 „ „ 20	12	6	18	65 „ „ 70	29	6	35
20 „ „ 25	26	13	39	70 „ „ 75	24	5	29
25 „ „ 30	23	15	38	75 „ „ 80	20	2	22
30 „ „ 35	28	16	44	80 „ „ 85	9	..	9
35 „ „ 40	37	13	50	85 „ „ 90	3	..	3
40 „ „ 45	52	15	67	90 „ „ 95	1	..	1
45 „ „ 50	47	16	66				
50 „ „ 55	45	20	65				
55 „ „ 60	53	17	70	Total Deaths ..	463	161	624



(e) *Occupations of Males.* The next table shows the occupations of the males who committed suicide in 1921, 1931 and 1941 :—

### OCCUPATIONS OF MALES WHO COMMITTED SUICIDE : AUSTRALIA.

Occupation Group.	Number of Male Deaths.			Percentage of Total.		
	1921.	1931.	1941.	1921.	1931.	1941.
				%	%	%
Professional .. ..	32	29	(a) 61	6.27	4.21	(a) 13.17
Domestic .. ..	20	22	16	3.92	3.19	3.46
Commercial .. ..	81	106	46	15.88	15.38	9.94
Transport and Communica- tion .. ..	42	52	26	8.24	7.55	5.61
Industrial .. ..	180	256	88	35.29	37.16	19.01
Agricultural, Pastoral, Min- ing, etc. .. ..	131	182	125	25.69	26.41	27.00
Indefinite .. ..	21	39	b101	4.12	5.66	b21.81
Dependent .. ..	3	3		0.59	0.44	
Total Male Deaths ..	510	689	463	100.00	100.00	100.00

(a) Approximately 25 (5 per cent.) clerks, etc., not specified as belonging to any industry, formerly included under "Commercial", are included under "Professional". (b) Approximately 80 (17 per cent.) labourers, etc., not specified as belonging to any industry, formerly included under "Industrial" are included under "Indefinite".

(f) *Death-rates, Various Countries.* The following comparative table for various countries shows that Australia occupies a fairly favourable position as regards the death-rate from suicide :—

### SUICIDE : DEATHS PER 100,000 PERSONS LIVING, VARIOUS COUNTRIES.

Country.	Year.	Rate.	Country.	Year.	Rate.
Egypt .. ..	1936	2.0	Union of South Africa (a) ..	1939	11.3
Eire .. ..	1939	2.7	Great Britain and Nor- thern Ireland ..	1936	12.2
Spain .. ..	1935	3.9	England and Wales ..	1936	12.4
Northern Ireland ..	1939	5.2	Portugal .. ..	1939	12.9
Greece .. ..	1936	5.7	U.S. of America ..	1940	14.4
Norway .. ..	1937	6.9	Japan .. ..	1936	15.1
Italy .. ..	1938	7.2	Sweden .. ..	1937	15.6
Victoria .. ..	1941	7.8	Finland .. ..	1936	16.2
Netherlands ..	1936	8.1	Belgium .. ..	1935	16.8
Canada .. ..	1940	8.3	Denmark .. ..	1935	19.4
South Australia ..	1941	8.5	France .. ..	1934	21.4
Tasmania .. ..	1941	8.8	Poland (b) .. ..	1936	22.0
<b>Australia .. ..</b>	<b>1941</b>	<b>8.8</b>	Switzerland ..	1939	23.8
New South Wales ..	1941	8.8	Hungary .. ..	1939	26.0
Western Australia ..	1941	9.0	Germany .. ..	1935	27.5
Scotland .. ..	1936	10.0	Czechoslovakia ..	1936	27.8
Queensland .. ..	1941	10.3			
New Zealand .. ..	1940	10.9			

(a) European population only.

(b) In towns with over 100,000 inhabitants.

(xiv) *Homicide (82).* Deaths from homicide in 1941 numbered 60, which was 39 less than the previous year and 33 less than the average for the five years 1935 to 1939, namely, 93. See par. (xvi).

(xv) *Accidental or Violent Deaths (except Suicide and Homicide).* Deaths from accidents in 1941 numbered 3,723 compared with an average of 3,912 for the previous five years. Of the deaths in 1941—1,384 occurred in New South Wales; 1,006 in Victoria; 539 in Queensland; 342 in South Australia; 294 in Western Australia; 129 in Tasmania; 20 in Northern Territory; and 9 in the Australian Capital Territory. See par. (xvi).

(xvi) *Accidental or Violent Deaths (including Suicide and Homicide).* The following table shows the various kinds of violent deaths, including suicides and homicides, recorded in Australia for 1941.

## DEATHS FROM EXTERNAL VIOLENCE : AUSTRALIA, 1941.

Cause of Death.	Males.	Females.	Persons.
Suicide (see par. (xiii)) .. .. .	463	161	624
Infanticide (murder of children under 1 year) ..	..	6	6
Homicide by firearms .. .. .	4	13	17
Homicide by cutting or piercing instruments ..	8	6	14
Homicide by other means .. .. .	18	5	23
<b>Homicide Total</b> .. .. .	<b>30</b>	<b>30</b>	<b>60</b>
Accidents on railways .. .. .	153	24	177
Automobile accidents—			
Collisions with trains .. .. .	23	10	33
Collisions with trams .. .. .	20	5	25
Other automobile accidents .. .. .	796	211	1,007
Motor cycle accidents .. .. .	76	14	90
Other road transport accidents—			
Tramway accidents .. .. .	50	16	66
Others .. .. .	88	14	102
Water transport accidents .. .. .	38	1	39
Air transport accidents .. .. .	82	1	83
Accidents in mines and quarries .. .. .	83	1	84
Agricultural and forestry accidents—			
Accidents from farm machinery, &c. .. .. .	27	..	27
Injury by animals .. .. .	23	..	23
Others .. .. .	62	1	63
Accidents caused by machinery n.e.i. .. .. .	39	..	39
Food poisoning .. .. .	5	4	9
Accidental absorption of irrespirable or poisonous gas .. .. .	15	4	19
Other acute accidental poisonings (not by gas) ..	34	15	49
Conflagration .. .. .	21	5	26
Accidental burns (conflagration excepted) ..	92	62	154
Accidental mechanical suffocation .. .. .	38	26	64
Accidental drowning .. .. .	326	77	403
Accidental injury by firearms .. .. .	74	9	83
Accidental injury by cutting or piercing instruments	6	..	6
Accidental injury by falling, crushing, etc.—			
Fall, not otherwise specified .. .. .	406	363	769
Other crushings .. .. .	49	5	54
Injuries by animals (n.e.i.) .. .. .	16	6	22
Hunger or thirst .. .. .	4	1	5
Excessive cold .. .. .	3	..	3
Excessive heat .. .. .	13	8	21
Lightning .. .. .	5	..	5
Other accidental electric shocks .. .. .	30	1	31
Attack by venomous animals—			
Snakebite .. .. .	4	..	4
Other .. .. .	4	2	6
Other accidents—			
Accidents due to medical or surgical intervention	2	2	4
Lack of care of the new-born .. .. .	2	3	5
Other accidents .. .. .	86	35	121
Deaths due to operations of war .. .. .	2	..	2
<b>External Violence, excluding Suicide and Homicide</b>	<b>2,797</b>	<b>926</b>	<b>3,723</b>
<b>Total Deaths from External Violence</b> ..	<b>3,290</b>	<b>1,117</b>	<b>4,407</b>

The following table of death-rates per million of mean population reveals for External Violence (excluding Suicide and Homicide), which consists mainly of accidents, a decrease in 1921-25, but an increase in the rates for 1926-30 to which the growth of automobile accidents contributed very largely. A decreased death-rate was recorded during the period 1931-35, but the rate rose again during the period 1936-40. The sharp decline in 1941 may be attributed to the decreased number of automobile accidents which have resulted from the war-time restrictions of travel.

**DEATH-RATES,(a) ETC., EXTERNAL VIOLENCE : AUSTRALIA.**

Period.	Death-rates from Homicide.			Death-rates from External Violence, excluding Suicide and Homicide.			Death-rates from all External Violence.			All External Violence Proportion of 10,000 Deaths.
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	
1911-15 ..	21	16	19	948	268	621	1,170	330	770	718
1921-25 ..	17	13	15	753	211	487	950	260	610	643
1926-30 ..	19	15	17	843	240	549	1,070	300	690	746
1931-35 ..	21	11	16	714	223	472	923	284	609	676
1936-40 ..	18	9	13	862	283	576	1,069	342	699	725
1936 ..	19	10	14	802	255	533	999	318	663	703
1937 ..	22	9	16	877	268	575	1,065	321	697	739
1938 ..	15	9	12	843	277	564	1,023	336	684	709
1939 ..	15	6	11	943	335	642	1,129	393	765	771
1940 ..	18	10	14	887	308	600	1,024	340	685	702
1941 ..	8	9	8	782	262	525	919	317	621	619

(a) Number of deaths per 1,000,000 of mean population.

(xvii) "Other Diseases". The intermediate and the abridged classifications of causes of death used in Tables A to E in the preceding pages differ from that used in issues of the Official Year Book previous to No. 25 in that no residue of "other diseases" is shown at the foot. The items are ranged in classes or groups of classes and each class or group of classes is made complete by the addition of an "other diseases" item for that class or group of classes. These "other diseases" items of the intermediate classification are expanded into their constituent causes in the following table:—

**F.—DEATHS FROM "OTHER DISEASES" : AUSTRALIA, 1941.**

Causes.	General Classification Number.	M.	F.	Total.
<b>17. OTHER INFECTIOUS AND PARASITIC DISEASES.</b>				
Cerebro-spinal meningococcal meningitis ..	6	148	91	239
Malignant pustule and anthrax .. ..	7	1	..	1
Erysipelas .. ..	11	18	12	30
Tetanus .. ..	12	60	13	73
Leprosy .. ..	23	6	4	10
Gonococcal infections .. ..	25	..	1	1
Diseases due to spirochaetes, n.e.i. ..	32	4	3	7
Acute poliomyelitis and polioencephalitis ..	36	15	10	25
Acute infectious encephalitis .. ..	37	20	16	36
Herpes zoster .. ..	38c	1	..	1
German measles .. ..	38d	1	1	2
Chicken pox .. ..	38e	..	2	2
Other diseases due to viruses .. ..	38f	1	..	1
Mycoses .. ..	43	9	2	11
Venereal diseases n.e.i. .. ..	44a	..	1	1
Pernicious lymphogranulomatosis .. ..	44b	47	28	75
Mumps .. ..	44c	8	11	19
Other infectious and parasitic diseases ..	44d	1	..	1
<b>Total .. ..</b>	<b>..</b>	<b>340</b>	<b>195</b>	<b>535</b>



F.—DEATHS FROM "OTHER DISEASES": AUSTRALIA, 1941—*continued*.

Causes.				General Classifi- cation Number.	M.	F.	Total.
<b>29. OTHER GENERAL DISEASES.</b>							
Diseases of the pituitary gland .. .. .	..	..	..	62	2	6	8
Diseases of the thymus (including status lymphaticus) ..	..	..	..	64	18	9	27
Diseases of the adrenal glands .. .. .	..	..	..	65	7	22	29
Other general diseases .. .. .	..	..	..	66	27	24	51
Total .. .. .	..	..	..	..	54	61	115
<b>30. AVITAMINOSES.</b>							
Scurvy .. .. .	..	..	..	67	3	1	4
Beri-beri .. .. .	..	..	..	68	3	3	6
Pellagra .. .. .	..	..	..	69	..	..	..
Rickets .. .. .	..	..	..	70	2	2	4
Other vitamin-deficiency diseases .. .. .	..	..	..	71	..	..	..
Total .. .. .	..	..	..	..	8	6	14
<b>32. LEUCÆMIAS, ETC., AND OTHER DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.</b>							
Hæmorrhagic conditions .. .. .	..	..	..	72	24	20	44
Leucæmia, lymphadenoma—							
Leucæmia .. .. .	..	..	..	74 <sup>a</sup>	118	102	220
Aleucæmia (lymphadenoma) .. .. .	..	..	..	74 <sup>b</sup>	4	3	7
Diseases of the spleen .. .. .	..	..	..	75	17	27	44
Other diseases of the blood and blood-forming organs ..	..	..	..	76	4	7	11
Total .. .. .	..	..	..	..	167	159	326
<b>34. OTHER CHRONIC POISONING.</b>							
Lead poisoning—							
(a) Occupational .. .. .	..	..	..	78 <sup>a</sup>	7	..	7
(b) Other .. .. .	..	..	..	78 <sup>b</sup>	5	2	7
Chronic poisoning by other mineral and organic sub- stances—							
(a) Occupational .. .. .	..	..	..	79 <sup>a</sup>	1	..	1
(b) Other .. .. .	..	..	..	79 <sup>b</sup>	1	..	1
Total .. .. .	..	..	..	..	14	2	16
<b>40. OTHER DISEASES OF NERVOUS SYSTEM.</b>							
Encephalitis (not epidemic)—							
Intra-cranial abscess .. .. .	..	..	..	80 <sup>a</sup>	22	9	31
Others .. .. .	..	..	..	80 <sup>b</sup>	38	27	65
Convulsions of infants under five years of age ..	..	..	..	86	16	18	34
Other diseases of the nervous system—							
Chorea .. .. .	..	..	..	87 <sup>a</sup>	..	1	1
Neuritis .. .. .	..	..	..	87 <sup>b</sup>	5	3	8
Paralysis agitans .. .. .	..	..	..	87 <sup>c</sup>	102	72	174
Disseminated sclerosis .. .. .	..	..	..	87 <sup>d</sup>	27	37	64
Other diseases .. .. .	..	..	..	87 <sup>e</sup>	25	15	40
Total .. .. .	..	..	..	..	235	182	417
<b>48. OTHER DISEASES OF THE CIRCULATORY SYSTEM.</b>							
Aneurysm (other than heart and aorta) .. .. .	..	..	..	96	58	46	104
Other diseases of the arteries .. .. .	..	..	..	99	37	39	76
Diseases of the veins (varices, hæmorrhoids, phlebitis, etc.) .. .. .	..	..	..	100	14	28	42
Diseases of the lymphatic system, lymphangitis, etc. ..	..	..	..	101	6	5	11
High blood pressure (idiopathic) .. .. .	..	..	..	102	90	68	158
Other diseases of the circulatory system .. .. .	..	..	..	103	4	3	7
Total .. .. .	..	..	..	..	209	189	398

F.—DEATHS FROM "OTHER DISEASES": AUSTRALIA, 1941—*continued.*

Cause.	General Classifi- cation Number.	M.	F.	Total.
<b>52. OTHER DISEASES OF THE RESPIRATORY SYSTEM.</b>				
Diseases of the nasal fossæ and annexa .. .. .	104	25	15	40
Diseases of the larynx .. .. .	105	13	10	23
Congestion, œdema, embolism, etc., of the lungs .. .. .	111	253	275	528
Asthma .. .. .	112	71	63	134
Pulmonary emphysema .. .. .	113	8	2	10
Other diseases of the respiratory system (except tuber- culosis)—				
Silicosis and other occupational respiratory diseases	114a	92	..	92
Gangrene of the lung .. .. .	114b	4	2	6
Abscess of the lung .. .. .	114c	33	7	40
Chronic interstitial pneumonia other than occupational	114d	23	8	31
Other diseases not specified as occupational .. .. .	114e	9	3	12
Total .. .. .	..	531	385	916
<b>60. OTHER DISEASES OF THE DIGESTIVE SYSTEM.</b>				
Diseases of the buccal cavity, pharynx, etc.—				
Pharynx and tonsils .. .. .	115a	62	50	112
Buccal cavity and annexa .. .. .	115b	15	10	25
Diseases of the œsophagus .. .. .	116	12	3	15
Other diseases of the stomach (cancer excepted) .. .. .	118	38	24	62
Other diseases of the intestines .. .. .	123	57	53	110
Diseases of the pancreas .. .. .	128	23	34	57
Peritonitis (without specified cause) .. .. .	129	44	41	85
Total .. .. .	..	251	215	466
<b>72. PUERPERAL CAUSES.</b>				
Hæmorrhage of childbirth and the puerperium .. .. .	146	..	44	44
Puerperal toxæmias—				
Puerperal eclampsia .. .. .	148a	..	27	27
Puerperal albuminuria and nephritis .. .. .	148b	..	27	27
Acute yellow atrophy of the liver (post-partum) .. .. .	148c	..	2	2
Other puerperal toxæmias .. .. .	148d	..	7	7
Other accidents of childbirth .. .. .	149	..	54	54
Other or unspecified diseases of childbirth and the puerperium .. .. .	150	..	13	13
Total .. .. .	..	..	174	174

14. Causes of Deaths in Classes.—The figures in the preceding sub-sections relate to specific causes of death, and are of greater value in medical statistics than a mere grouping under general headings. The classification under eighteen general headings adopted by the compilers of the International Nomenclature is, however, shown in the

following table, together with the death-rates and proportions of total deaths pertaining to those classes. A further table furnishes the death-rates for the quinquennia 1921-25, 1931-35 and 1936-40 :—

### DEATHS, DEATH-RATE,<sup>(a)</sup> ETC., IN CLASSES : AUSTRALIA, 1941.

Class.	Total Deaths.			Death-rates.			Proportion of 10,000 Deaths.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1. Parasitic and Infectious Diseases	2,989	1,852	4,841	83	53	68	758	583	680
2. Cancer and Other Tumours	4,429	4,466	8,895	124	127	125	1,124	1,406	1,250
3. Rheumatism, Diseases of Nutrition, of Endocrine Glands, and Other General Diseases	748	1,353	2,101	21	38	30	190	426	295
4. Diseases of the Blood and Blood-forming Organs	269	270	539	7	8	8	68	85	76
5. Chronic Poisoning and Intoxications	82	29	111	2	1	2	21	9	16
6. Diseases of the Nervous System and Organs of Special Sense	3,366	4,099	7,465	94	116	105	854	1,290	1,049
7. Diseases of the Circulatory System	11,881	8,983	20,867	332	255	294	3,016	2,828	2,932
8. Diseases of the Respiratory System	3,389	2,578	5,967	95	73	84	860	811	838
9. Diseases of the Digestive System	2,082	1,505	3,587	58	43	50	528	474	504
10. Diseases of the Genito-Urinary System	3,075	2,041	5,116	86	58	72	780	643	719
11. Pregnancy, Labour and Puerperal State	..	490	490	..	14	7	..	154	69
12. Diseases of the Skin and of the Cellular Tissue	81	77	158	2	2	2	21	24	22
13. Diseases of the Bones and Organs of Locomotion	68	47	115	2	1	2	17	15	16
14. Congenital Malformations	397	339	736	11	10	10	100	107	103
15. Early Infancy	1,755	1,312	3,067	49	37	43	446	413	431
16. Old Age	1,329	1,157	2,486	37	33	35	337	364	349
17. Violent or Accidental Deaths	3,290	1,117	4,407	92	32	62	835	352	619
18. Causes of Death not Determined	176	52	228	5	1	3	45	16	32
Total .. ..	39,409	31,767	71,176	1,100	902	1,002	10,000	10,000	10,000

(a) Number of deaths per 100,000 of mean population.

### QUINQUENNIAL DEATH-RATES IN CLASSES : AUSTRALIA.

Class.	Number of Deaths per 100,000 of Mean Population.								
	1921 to 1925.			1931 to 1935.			1936 to 1940.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1. Parasitic and Infectious Diseases	248	222	236	92	70	81	80	56	68
2. Cancer and Other Tumours				113	108	110	121	120	121
3. Rheumatism, Diseases of Nutrition, of Endocrine Glands, and Other General Diseases				18	33	25	20	36	28
4. Diseases of the Blood and Blood-forming Organs				9	9	9	8	8	8
5. Chronic Poisoning and Intoxications				2	..	1	2	1	1
6. Diseases of the Nervous System and Organs of Special Sense	93	83	88	66	67	67	67	74	70
7. Diseases of the Circulatory System	150	118	134	249	200	225	318	245	282
8. Diseases of the Respiratory System	121	88	105	101	75	88	100	72	86
9. Diseases of the Digestive System	97	81	89	60	46	53	59	44	52
10. Diseases of the Genito-Urinary System	72	49	60	81	59	70	85	61	73
11. Puerperal Condition	..	25	12	..	19	9	..	17	8
12. Diseases of Skin and Cellular Tissue	6	4	5	3	3	3	3	2	3
13. Diseases of Organs of Locomotion	3	2	2	3	1	2	3	1	2
14. Congenital Malformations	12	10	11	11	8	10	11	9	10
15. Early Infancy	73	56	65	44	34	39	43	33	38
16. Old Age	76	68	72	42	42	42	39	41	40
17. Violent or Accidental Deaths	95	26	61	92	28	61	105	34	70
18. Causes of Death not Determined	15	9	12	7	2	5	5	2	4
Total .. ..	1,061	841	952	993	804	900	1,069	856	964



15. **Ages at Death of Married Males and Females, and Issue.**—*Demography Bulletin*, No. 59, contains a number of tables showing, in combination with the issue, the ages at marriage, ages at death, and occupations of married persons who died in Australia in 1941. A summary of those tables is given hereunder. Deaths of married males in 1941 numbered 26,240, and of married females, 23,636. The tabulations which follow deal, however, with only 25,862 males and 23,475 females, the information regarding issue in the remaining 539 cases being incomplete. The total number of children in the families of the 25,862 males was 101,077, and of the 23,475 females, 98,951. The average number of children is shown for various age-groups in the following table :—

**AGES AT DEATH OF MARRIED MALES AND FEMALES, AND AVERAGE ISSUE : AUSTRALIA.**

Age at Death.	Males.				Females.			
	1911.	1921.	1931.	1941.	1911.	1921.	1931.	1941.
Under 20 years ..	0.33	..	0.75	..	0.94	0.77	0.66	0.79
20 to 24 ..	0.77	0.84	0.81	0.73	1.27	1.22	1.13	0.95
25 " 29 ..	1.25	1.29	1.33	1.12	1.82	1.86	1.81	1.45
30 " 34 ..	2.05	2.06	1.79	1.76	2.74	2.45	2.34	1.91
35 " 39 ..	2.80	2.58	2.13	2.11	3.04	3.29	2.89	2.30
40 " 44 ..	3.47	3.23	2.77	2.49	4.09	3.66	3.29	2.77
45 " 49 ..	4.09	3.48	3.10	2.68	4.54	3.76	3.55	2.93
50 " 54 ..	4.75	3.76	3.46	2.96	5.35	4.23	3.60	3.29
55 " 59 ..	5.44	4.41	3.69	3.28	5.86	4.69	4.01	3.55
60 " 64 ..	5.95	4.98	4.02	3.55	5.99	5.39	4.21	3.79
65 " 69 ..	6.23	5.50	4.41	3.73	6.50	5.86	4.82	4.01
70 " 74 ..	6.41	6.06	5.06	4.17	6.38	6.30	5.41	4.29
75 " 79 ..	6.75	6.66	5.65	4.56	6.72	6.56	6.02	4.85
80 " 84 ..	6.68	6.89	6.17	4.93	6.22	6.76	6.26	5.39
85 " 89 ..	6.67	7.18	6.59	5.70	5.97	6.93	6.57	5.85
90 " 94 ..	6.03	7.21	6.94	6.57	5.69	6.53	6.73	6.11
95 " 99 ..	7.30	6.97	6.69	7.04	5.05	6.05	7.10	6.34
100 years and upwards ..	9.33	9.20	7.00	8.69	5.17	5.11	8.20	6.73
Age not stated ..	4.33	5.36	5.00	..	4.60	5.80	5.00	..
All Ages ..	5.42	4.97	4.44	3.91	5.35	5.05	4.72	4.22

The figures in the preceding table include the issue both living and dead, the proportion between them, taking the issue of deceased males and females together, being about 1,000 to 230. The totals are shown in the following table :—

**ISSUE OF DECEASED MARRIED MALES AND FEMALES : AUSTRALIA, 1941.**

Issue of Married Males.	Males.	Females.	Total.	Issue of Married Females.	Males.	Females.	Total.
Living ..	42,840	41,630	84,470	Living ..	38,646	39,517	78,163
Dead ..	9,473	7,134	16,607	Dead ..	11,913	8,875	20,788
Total ..	52,313	48,764	101,077	Total ..	50,559	48,392	98,951

16. **Ages at Marriage of Deceased Males and Females, and Issue.**—While the table giving the average issue of married males and females naturally shows an increase in the averages with advancing ages at death, the following table which gives the average

issue of males and females according to the age at marriage of the deceased parent shows a corresponding decrease in the averages as the age at marriage advances :—

### AGES AT MARRIAGE OF DECEASED MALES AND FEMALES, AND AVERAGE ISSUE : AUSTRALIA.

Age at Marriage.	Average Issue.							
	Males.				Females.			
	1911.	1921.	1931.	1941.	1911.	1921.	1931.	1941.
Under 15 years ..	..	..	..	..	9.71	7.60	6.36	7.80
15 to 19 " ..	6.97	6.32	6.15	5.40	7.10	6.97	6.79	6.10
20 " 24 " ..	6.34	6.05	5.56	4.89	5.77	5.50	5.23	4.80
25 " 29 " ..	5.70	5.17	4.70	4.21	4.27	4.09	3.79	3.51
30 " 34 " ..	4.92	4.45	3.96	3.41	3.04	2.66	2.42	2.35
35 " 39 " ..	4.05	3.90	3.14	2.80	1.68	1.61	1.40	1.26
40 " 44 " ..	3.43	2.67	2.36	2.01	0.72	0.62	3.88	0.35
45 " 49 " ..	2.59	2.20	1.96	1.52	0.26	0.03	0.12	0.01
50 " 54 " ..	2.45	1.76	1.60	1.05	..	..	..	..
55 " 59 " ..	1.66	1.30	0.95	0.79	..	..	..	..
60 " 64 " ..	2.00	0.33	0.63	0.29	..	..	..	..
65 years and upwards ..	1.00	0.25	0.18	0.01	..	..	..	..
Age unspecified ..	5.40	4.93	3.64	2.95	5.23	5.41	3.96	2.45
All Ages ..	5.42	4.97	4.44	3.91	5.35	5.05	4.72	4.22

17. Birthplaces of Deceased Married Males and Females, and Issue.—The table showing the birthplaces of married males and females who died in 1911 and 1940, together with the average issue, may be found in the Official Year Book, No. 34, p. 366.

18. Occupations of Deceased Married Males, and Issue.—The following tabulation shows the average issue in combination with the occupation of deceased males :—

### OCCUPATIONS OF DECEASED MARRIED MALES AND AVERAGE ISSUE : AUSTRALIA.

Occupation Group.	Deaths of Married Males.			Average Issue.		
	1921.	1931.	1941.	1921.	1931.	1941.
Professional .. ..	926	1,194	(11)3,001	4.04	3.78	(a) 3.10
Domestic .. ..	552	621	709	3.55	3.64	2.97
Commercial .. ..	1,977	2,962	3,018	4.18	3.55	3.35
Transport and Communication .. ..	1,254	1,742	2,195	4.63	4.15	3.84
Industrial .. ..	5,086	6,883	6,019	4.95	4.49	3.79
Agricultural, Pastoral, Mining, etc. .. ..	3,983	4,495	5,943	5.83	5.31	4.65
Indefinite .. ..	759	936	} 64,977	5.49	4.68	} 64.15
Unoccupied .. ..	15	39		4.00	3.85	
Total .. ..	14,552	18,872	25,862	4.97	4.44	3.91

(a) Approximately 1,500 clerks (average issue 3.0), not specified as belonging to any industry, formerly included under "Commercial", are included under "Professional". (b) Approximately 4,000 labourers, etc. (average issue 4.1) not specified as belonging to any industry, formerly included under "Industrial", are included under "Indefinite".

### § 5. Australian Life Tables.

The Official Year Book, No. 20, pp. 962 and 969–73, contains a synopsis of the various Australian Life Tables, and comparisons with other countries of the expectation of life at various ages were also given. In connexion with the Census of 1933 Life Tables have been constructed in respect of each sex for Australia as a whole, and these together with monetary tables on single and joint lives based thereon have been published as separate Census publications. A specially contributed article by F. W. Barford, M.A., A.L.A., on the results of the tables for single lives appeared in Official Year Book, No. 29, p. 928.

### § 6. Registration of Births, Deaths and Marriages in the Australian Capital Territory.

To the end of 1929 the provisions of the Registration of Births, Deaths and Marriages Act of 1899 and the Marriage Act of 1899 of New South Wales applied to the Australian Capital Territory. Births, deaths and marriages occurring within the Territory were registered by the District Registrars at Queanbeyan and Nowra, and were incorporated in the New South Wales records.

In 1929, however, the Registration of Births, Deaths and Marriages Ordinances were enacted, providing for the assumption by the Commonwealth Government of the function of registration within the Territory as from 1st January, 1930. All registrations are made at the Registrar's Office, Civic Centre, Canberra.

Marriages within the Territory are celebrated according to the conditions prescribed by the Marriage Ordinance 1929–1938. This Ordinance, which closely follows the provisions of the Marriage Act of New South Wales, which it supersedes as regards the Australian Capital Territory, came into operation on 1st January, 1930.



## CHAPTER XIV.

## TRADE.

## § 1. Introductory.

**Constitutional Powers of the Commonwealth in regard to Commerce.**—The powers vested in the Commonwealth Parliament by the Commonwealth Constitution with respect to oversea trade and commerce will be found in Sub-section 51 (i) and Sections 86 to 95 (see pp. 14 and 20 *ante*).

## § 2. Commonwealth Legislation affecting Oversea Trade.

**1. General.**—In previous issues of the Official Year Book brief particulars of the various Commonwealth Acts and amendments thereof affecting oversea trade are given in chronological order. The Customs Acts represent the administrative or machinery Acts under which the Customs Department operates, while the Customs Tariff provides the statutory authority for imposing the actual rates of duties operative from time to time.

The Acts at present in force are: The Customs Act 1901-1936; Customs Tariff, 1933-1939; Customs Tariff (Canadian Preference) 1934-1939; Customs Tariff (Exchange Adjustment) Act, 1933-1939; Customs Tariff (Industries Preservation) Act, 1921-1936; Customs Tariff (Newfoundland Preference) 1939; Customs Tariff (New Zealand Preference) Agreement Act, 1933; Customs Tariff (New Zealand Preference) 1933-1934; Customs Tariff (Papua and New Guinea Preference) 1936; Customs Tariff (Southern Rhodesian Preference) 1941; Customs Tariff (Primage Duties), 1934; Trading with Enemy Act, 1939-1940. A statement of the Acts passed in 1941 and 1942 appears in par. 16 on page 393.

**2. Customs Tariffs.**—The Customs Tariff 1921-1930 provided a British Preferential Tariff, an Intermediate Tariff and a General Tariff. The Customs Tariff 1933 made no provision for an Intermediate Tariff but this feature was restored by the Customs Tariff 1936.

"British Preferential Tariff" rates of duty apply to goods the produce or manufacture of the United Kingdom provided such goods comply with the laws and statutory regulations for the time being in force affecting the grant of British preference, and that the goods have been shipped in the United Kingdom to Australia and have not been transhipped, or, if transhipped, it is proved to the satisfaction of the Collector of Customs that the intended destination of the goods, when originally shipped from the United Kingdom, was Australia. The benefits of the British Preferential Tariff may be extended wholly or in part to any British non-self-governing colony, British protectorate or to certain territories governed under British mandate. The benefits of the British Preferential Tariff have been extended by separate Trade Agreements to certain goods the produce of the Dominions of Canada and New Zealand and to certain goods the produce of British non-self-governing colonies.

In submitting tariff schedules to Parliament on 20th March, 1936, the Minister for Trade and Customs said: "Another new feature of the schedules is the Intermediate Tariff. It has been re-introduced to provide a convenient avenue for expressing the level of duties which the Government propose should form the basis for trade treaties. The rates proposed under the protective items of the Intermediate Tariff express, in every case, a protective level for Australian industry as well as preserving the margins required under the Ottawa Agreement." The Customs Tariff 1933-1939 provides that the Governor-General may from time to time by proclamation declare that the Intermediate Tariff shall apply from a date and time specified to goods specified in the proclamation which are the produce or manufacture of the British or foreign country specified in the proclamation. The Intermediate Tariff was brought into operation on 1st January, 1937, by Customs Proclamations Nos. 338, 342, 343 and 369, which granted intermediate rates of duty to specified goods the produce of "Proclaimed Countries." The countries proclaimed include the United Kingdom, the Dominions and Colonies in respect of goods which do not comply with the conditions prescribed for the application of a lower tariff

and most foreign countries under the terms entitling them to most-favoured-nation treatment. The United States of America was an important exception, but Customs Proclamation No. 571 of 17th February, 1943, included it in the list of "Proclaimed Countries".

The "General Tariff" applies to all importations excepting :—

- (a) Goods the produce or manufacture of the United Kingdom, shipped in the United Kingdom ;
- (b) Goods the produce or manufacture of the following countries when admissible under the British Preferential Tariff or at a special rate of duty : Canada, New Zealand, Norfolk Island, Papua and New Guinea, and British non-self-governing Colonies, British Protectorates and certain Territories governed under British mandate.
- (c) Goods admitted under the provisions of the Intermediate Tariff.

The Customs Tariff 1933-1939 provides for duties on certain goods to be deferred. Where a deferred duty on any goods is provided in the Schedule, the Minister shall refer to the Tariff Board for inquiry and report the question whether the deferred duty should or should not operate on and after the date to which it has been deferred. The Board shall report whether the goods in respect of which the deferred duty is provided are being made or produced in Australia or will be so made or produced on, or immediately after, the date to which the duty has been deferred—(a) in reasonable quantities ; (b) of satisfactory quality ; and (c) at a reasonable price having regard, among other things, to the probable economic effect of the imposition of the deferred duty upon other industries concerned, and upon the community in general. Upon receipt of a report from the Tariff Board, the Minister may defer the duty further by notice published in the *Gazette*.

In pursuance of the trade diversion policy of the Commonwealth Government (see par. 5 of this section), an amendment of the Customs (Prohibited Imports) Regulations of 22nd May, 1936—Item 21—prohibited the import into Australia, except under special licence, of 84 classified groups of goods produced or manufactured in foreign countries. A list of the principal items affected is published in Official Year Book No. 30. Important modifications of the licensing system as applied to the 84 groups of goods referred to were announced on 7th December, 1937, by the Minister for Trade and Customs, who stated that in respect of goods not competitive with Australian industry, licences for importation would be granted irrespective of the country of origin. In respect of goods competitive with Australian industry the licensing system then in force would operate until duties adequate to the protection of the industries concerned had been determined. Tariff Schedules amending duties to give adequate protection to Australian industries established or extended during the currency of the licensing system were embodied in Customs and Excise Resolutions submitted to Parliament on 4th May, 1938, and the licensing restrictions ceased to have force from that date. The Acting Minister for Trade and Customs explained that the Schedules should be regarded as of a temporary nature until the industries could be inquired into and reported on by the Tariff Board.

Under Item 22 the import is prohibited, except under special licence, of motor vehicle chassis produced or manufactured in any country except the United Kingdom. Imports of chassis from the principal suppliers other than the United Kingdom are restricted to the same level of imports as for the twelve months ended 30th April, 1936.

From the same date, 22nd May, 1936, customs duties were increased on imports of certain items of cotton, artificial silk and silk piece goods and on motor chassis. The duties imposed on cotton and artificial silk piece goods were reduced as from 1st January, 1937.

3. **Preferential Tariff.**—(i) *British Preference.* The Commonwealth Tariff 1908 provided Preferential Tariff rates in favour of specified goods produced or manufactured in the United Kingdom. Subsequent legislation has extended the list of articles to which these rates apply. For the purpose of preferential treatment the following goods are deemed by Section 151A of the Customs Act 1901-1936 to be the produce or manufacture of the United Kingdom provided the final process of their production or manufacture was performed in that country.

- (a) Goods which are wholly produced or wholly manufactured in the United Kingdom from materials in one or more of the following classes—
- (i) Materials wholly produced or wholly manufactured in the United Kingdom or in Australia ;
  - (ii) Imported unmanufactured raw materials ;
  - (iii) Imported manufactured raw materials as determined by the Minister.
- (b) Goods of the factory or works cost of which not less than seventy-five per cent. is represented—
- (i) by labour or material of the United Kingdom ; or
  - (ii) by labour or material of the United Kingdom and labour or material of Australia.
- (c) Goods of a class or kind not commercially produced or manufactured in Australia and of the factory or works cost of which not less than 25 per cent. or 50 per cent. if the Minister so determines is represented—
- (i) by labour or material of the United Kingdom ; or
  - (ii) by labour or material of the United Kingdom and labour or material of Australia.

The benefits of the British Preferential Tariff have also been extended by separate Trade Agreements to certain goods the produce of the Dominions of Canada and New Zealand and by separate Tariff legislation to Newfoundland, Southern Rhodesia and to the Territories of Papua and New Guinea.

At the Imperial Economic Conference held at Ottawa, Canada, during July and August, 1932, a trade agreement providing increased preference was made between the Government of the United Kingdom and the Government of the Commonwealth of Australia. The Tariff proposals embodying the terms of the trade agreement came into operation on 14th October, 1932. An Act entitled the United Kingdom and Australia Trade Agreement Act 1932 approved the provisions of the trade agreement arising out of the Conference at Ottawa. Briefly stated the Commonwealth Government agrees (a) to invite Parliament to pass legislation making the tariff changes necessary to give effect to the preference formula set forth in the agreement ; (b) that protection by tariffs shall be afforded only to those industries which are reasonably assured of sound opportunities for success ; (c) that during the currency of the agreement the tariff shall be based on the principle that protective duties shall not exceed such a level as will give United Kingdom producers full opportunity of reasonable competition on the basis of the relative cost of economic and efficient production, provided that in the application of such principle special consideration may be given to the case of industries not fully established ; (d) that the Australian Tariff Board review existing protective duties in accordance with the foregoing principles, and after the receipt of the report of the Board the Parliament shall be invited to vary, wherever necessary, the tariff on goods of United Kingdom origin in such manner as to give effect to such principles ; (e) that no new protective duty shall be imposed and no existing duty shall be increased on United Kingdom goods to an amount in excess of the recommendation of the Tariff tribunal ; (f) that United Kingdom producers shall be entitled to full rights of audience before the Tariff Board when it has under consideration the above-mentioned matters ; (g) that, in so far as concerns goods the produce or manufacture of the United Kingdom, the Commonwealth Government undertake to (i) repeal the proclamation prohibiting the importation of certain goods ; (ii) remove as soon as practicable the surcharges imposed by resolution introduced into the Parliament of Australia on 24th May, 1932 ; and (iii) to reduce or remove primage duty as soon as the finances of Australia will allow. The agreement shall remain in force for a period of five years and come into effect on 20th August, 1932 (subject to the necessary legislative or other action being taken).

The prohibitions and surcharges referred to in this agreement were subsequently abolished and primage duty on a large number of items removed or reduced. The concessions granted by the Government of the United Kingdom under the terms of the



Ottawa trade agreement on goods of Australian origin are set out briefly in par. 13 of this section. Further reference to this trade agreement appears in the Appendix to Official Year Book No. 26, 1933.

The five years currency of the agreement terminated on 19th August, 1937, but in view of the negotiations then in progress between the Governments of United Kingdom and United States of America for a trade agreement, a review of the terms of the Ottawa Agreement became a matter of urgency. The United Kingdom Government at the time sought the concurrence of the Dominions in the modification of certain preferences granted under the Ottawa Agreements in order to facilitate the satisfactory conclusion of the agreement. As a consequence thereof a conference of United Kingdom and Australian Ministers was held in London early in 1938. A joint statement setting out the result of the conference was issued by the two Governments in the form of a Memorandum of Conclusions which was published by the United Kingdom Government on 20th July, 1938.

The Memorandum stresses the interdependence of the two countries in the matters of trade and defence. The United Kingdom is recognized as a great force for the maintenance of peace, and Australia is regarded as an important field for United Kingdom investment.

Both the United Kingdom and Australia have certain problems and requirements existing which each not only admits but is prepared to treat as the basis for trade relationships between the two countries. It is regarded as essential in the interests of both countries that Australia should increase its population and this can best be done by the progressive development of her secondary industries. This policy however, conflicts with the position of the United Kingdom as a great oversea trader and exporter of manufactured goods to Empire and foreign countries and any diminution in the exports of United Kingdom will affect the capacity of that country to absorb foodstuffs and raw materials from countries like Australia.

While strongly adhering to the principle of preferential trade within the Empire the representatives of both countries realized that it was desirable that each country should from time to time enter into Trade agreements with foreign countries in order to make an effective contribution to the expansion of International Trade. The Ministers agreed to co-operate in every practical way.

Difficulties immediately arise when an attempt is made to reconcile the expansion of the secondary industries of Australia with that of the United Kingdom to maintain her existing trade in Australian markets. In the Ottawa Agreement, Articles 9 to 13 were framed to meet this difficulty but the results were not entirely satisfactory. It was found impracticable to revise the Articles to satisfy the requirements of both countries, and their substitution by a schedule of maximum rates of duty was suggested. This principle of making trade treaties on the basis of fixing rates of duty is common in most international arrangements but it was thought that special difficulties might arise in applying it to a young and developing country like Australia which also has a system of wage-fixing tribunals and fluctuations of industrial costs. The Australian Ministers agreed to investigate the possibility of adopting such a system after determining the possible course of development of secondary industries in Australia during the next few years.

In making the inquiry the Commonwealth Government propose to have regard to *inter alia* such important factors as—

- (a) the necessity for increased Australian population ;
- (b) the economics and future growth of primary production in Australia ;
- (c) the necessity on national and economic grounds for a continued development of Australian secondary industries ;
- (d) the defence needs of Australia ;
- (e) the maintenance of United Kingdom—Australian trade by effective preference to United Kingdom in Australia and to Australia in the United Kingdom ; and
- (f) the need for new markets for Australian exports and for foreign trade arrangements.

The present agreement will continue in force pending the decision of the Australian Government on this matter, and in the meantime the United Kingdom Ministers will not press their objection to interpretations now placed by the Australian Tariff Board upon Article 10, while the Australian Ministers have undertaken to make every effort to ensure that the Tariff Board's recommendations under Article 11 are made effective.

In conclusion the memorandum refers to considerable discussions between Ministers with regard to the marketing of primary produce in the United Kingdom. It was recognized that United Kingdom agriculture was entitled to first consideration in the home market, but that Empire products should be granted second consideration. It was felt that, in the present state of trade, the interests of all parties could best be served by means of orderly marketing secured by collective action on the part of Empire producers' organizations in co-operation with corresponding bodies in other countries in respect of particular commodities. A similar method has already been adopted in regard to beef by the creation of the Empire Beef Council and the International Beef Conference, and in the opinion of the Ministers great benefit to both home and Dominion producers can be secured by co-operation of this character in relation to other commodities.

On the basis of the imports during 1913 the preferential provisions of the Tariff of 1908-1911 covered 65 per cent. of the imports of merchandise of United Kingdom origin, the margin of preference being equal to 5 per cent. of the value of the goods. On the basis of the imports during 1939-40 the Customs Tariff 1933-1939 extended the application of the Preferential Tariff rates to 86.0 per cent. of the imports from the United Kingdom, and at the same time increased the margin of preference to 19.0 per cent. ad valorem. These percentages relate to all imports on which preference was granted, whether dutiable or free under the preferential provisions. With regard to imports on which preference was granted and which were dutiable under both the Preferential and General Tariffs, the average equivalent ad valorem rate of duty paid in 1939-40 under the Customs Tariff 1933-1939 on goods of United Kingdom origin was about 15.3 per cent., whereas the same goods under the General Tariff rates would have been called upon to pay an average rate of about 39.5 per cent.

An application of the Customs Tariff 1933-1939 to the total imports of £A56,858,624 (including outside packages) from the United Kingdom entered for home consumption during 1939-40 shows that the value of the goods of United Kingdom origin which participated in the preferential provisions of the Tariff was £A47,668,186, upon which duty to the amount of £A4,217,357 was collected. Under the General Tariff the same goods would have paid £A13,406,659 duty or £A9,189,302 more than was paid at preferential rates, representing an additional duty of 19.3 per cent. on the value of the goods. The principal classes which benefited under the Preferential Tariff and the additional duty that would have been collected under the General Tariff during 1939-40 were textiles, £4,475,435; metals and metal manufactures, £2,737,267; machines and machinery, £1,552,703; spirituous and alcoholic liquors, £1,325,867; drugs, chemicals, etc., £592,337; earthenware, glass, etc., £515,963; apparel, £329,393; paper, £291,919; manufactured fibres, £258,389; stationery and paper manufactures, £166,449; jewellery and fancy goods, £147,924; and optical, surgical and scientific instruments, £145,430.

If a preferential tariff had not been in operation in 1939-40 £A9,189,302 additional customs duty would have been collected under the general tariff on United Kingdom goods imported at preferential rates. It would be improper, however, to speak of this sum as the "value" of preference to the United Kingdom as some of the preferential goods would have come from the United Kingdom without preference.

The margin of preference granted by the preferential tariff has been increased to some extent by the operation of the Customs Tariff (Exchange Adjustment) Act 1933-1939. The total amount deducted cannot be stated owing to the fact that since the end of 1934 "net" rates of duty (after making allowance for exchange adjustment) recommended by the Tariff Board have been applicable.

The value of goods from countries other than the United Kingdom which were adversely affected by the preferential provisions of the Tariff amounted to £A23,091,366 and the duty collected thereon was £A6,427,163 or £A3,925,027 more than would have been paid under the British Preferential Tariff Rates.

The following table shows the effect of the Preferential provisions of the Customs Tariff on imports of goods affected favourably or adversely by the British Preferential Tariff during the years 1937-38 to 1939-40 :—

### EFFECT OF THE PREFERENTIAL PROVISIONS OF THE CUSTOMS TARIFF.

#### IMPORTS OF GOODS AFFECTED FAVOURABLY OR ADVERSELY BY THE BRITISH PREFERENTIAL TARIFF.

Particulars.	United Kingdom.			Other Countries.(a)		
	1937-38.	1938-39.	1939-40.	1937-38.	1938-39.	1939-40.
GOODS OF A KIND WHICH WERE "FREE", IF FROM UNITED KINGDOM.						
Value of goods cleared for consumption ..	£A. 25,040,517	19,095,649	20,157,570	12,983,535	10,530,878	9,810,413
Amount of Duty collected thereon ..	£A. ..	..	..	1,600,664	1,415,247	1,265,533
Average ad valorem rate of Duty collected ..	% ..	..	..	12.3	13.4	12.9
Duty which would have been collected under General Tariff rates ..	£A. 3,213,203	2,474,807	2,550,415	..	..	..
Average ad valorem rate of Duty which would have been collected under General Tariff rates ..	% 12.8	13.0	12.7	..	..	..

#### GOODS OF A KIND WHICH WERE "DUTIABLE", IF FROM UNITED KINGDOM.

Value of goods cleared for consumption ..	£A. 28,058,500	24,586,678	27,510,616	14,253,772	12,305,081	13,280,955
Amount of Duty collected thereon ..	£A. 4,312,158 <sup>b</sup>	3,916,726 <sup>b</sup>	4,217,357 <sup>b</sup>	5,753,250	4,988,493	5,161,630
Average ad valorem rate of Duty collected ..	% 15.4	15.9	15.3	40.4	40.5	38.9
Duty which would have been collected on United Kingdom goods under General Tariff rates ..	£A. 11,195,361	10,012,544	10,856,244	..	..	..
Average ad valorem rate of Duty which would have been collected under General Tariff rates ..	% 39.9	40.7	39.5	..	..	..
Duty which would have been collected on goods of Other Countries under British Preferential Tariff ..	£A. ..	..	..	2,358,432 <sup>b</sup>	2,086,998 <sup>b</sup>	2,502,136 <sup>b</sup>
Average ad valorem rate of Duty which would have been collected under British Preferential Tariff ..	% ..	..	..	16.6	17.0	18.8
Amount of Rebate on United Kingdom goods as against General Tariff rates ..	£A. 6,883,203 <sup>b</sup>	6,095,818 <sup>b</sup>	6,638,887 <sup>b</sup>	..	..	..
Average ad valorem rate of Rebate on United Kingdom goods ..	% 24.5	24.8	24.1	..	..	..
Amount of Surcharge on goods from Other Countries as against British Preferential Tariff rates ..	£A. ..	..	..	3,394,818 <sup>b</sup>	2,901,495 <sup>b</sup>	2,659,494 <sup>b</sup>
Average ad valorem rate of Surcharge on goods of Other Countries ..	% ..	..	..	23.8	23.6	20.0

(a) Goods cleared under "General Tariff." (b) In computing this amount, account has been taken of the effect of the Exchange Adjustment Act on the margin of British Preference.



EFFECT OF THE PREFERENTIAL PROVISIONS OF THE CUSTOMS  
TARIFF—*continued.*

Particulars.	United Kingdom.			Other Countries.(a).		
	1937-38.	1938-39.	1939-40.	1937-38.	1938-39.	1939-40.
Value of goods cleared for consumption .. .. £A.	53,099,017	43,682,327	47,668,186	27,237,307	22,835,959	23,091,366
Amount of Duty collected thereon .. .. £A.	4,312,158b	3,916,726b	4,217,357b	7,353,914	6,403,740	6,427,163
Average ad valorem rate of Duty collected .. %	8.1	9.0	8.9	27.0	28.0	27.8
Duty which would have been collected on United Kingdom goods under General Tariff rates .. £A.	14,408,564	12,487,351	13,406,659	..	..	..
Average ad valorem rate of Duty which would have been collected under General Tariff rates .. %	27.1	28.6	28.1	..	..	..
Duty which would have been collected on goods of Other Countries under British Preferential Tariff .. £A.	..	..	..	2,358,432b	2,086,998b	2,502,136b
Average ad valorem rate of Duty which would have been collected under British Preferential Tariff .. %	..	..	..	8.7	9.1	10.8
Amount of Rebate on United Kingdom goods as against General Tariff rates .. .. £A.	10,096,406b	8,570,625b	9,189,302b	..	..	..
Average ad valorem rate of Rebate on United Kingdom goods .. %	19.0	19.6	19.3	..	..	..
Amount of Surcharge on goods from other Countries as against British Preferential rates .. £A.	..	..	..	4,995,482b	4,316,742b	3,925,027b
Average ad valorem rate of Surcharge on goods of Other Countries .. %	..	..	..	18.3	18.9	17.0

(a) Goods cleared under "General Tariff." (b) In computing this amount, account has been taken of the effect of the Exchange Adjustment Act on the margin of British Preference.

(ii) *Intermediate Tariff Preference.* The Intermediate Tariff came into operation on 1st January, 1937, and during the year ended 30th June, 1940, was applicable wholly or in part to about 140 tariff items. In the period mentioned goods from "Proclaimed Countries" (i.e. foreign countries entitled to most-favoured-nation treatment) cleared at intermediate rates of duty were valued at £A7,349,895 on which £A2,128,775 duty was collected. Under the General Tariff the same goods would have paid £A3,806,054 duty or £A1,677,279 more than was paid at intermediate rates, representing an additional duty of 22.8 per cent. on the value of the goods. At British preferential rates of duty the same goods would have paid £A831,807, or £A1,296,968 less than was paid at intermediate rates, a reduction equivalent to an ad valorem duty of 17.7 per cent.

(iii) *Exchange Adjustment.* The Customs Tariff (Exchange Adjustment) Act 1933-1939 provides for adjustments in Duties of Customs, consequent upon depreciation in the value of Australian currency in relation to the currencies of countries, on goods to which the British Preferential Tariff applies. This Act came into operation on 5th October, 1933, but subsequent amendments have extended the list of items affected. The application of Section 5 of the Act is explained hereunder:—

The deduction to be made from duty in respect of protected goods (covered by items) specified in the schedule to the Act and admissible under the British Preferential Tariff

on account of the depreciation of Australian currency in relation to the currency of the British country exporting the protected goods to Australia will depend on:—

- (a) Whether the extent of depreciation is not less than  $16\frac{2}{3}$  per cent.; or
- (b) Whether the extent of depreciation is not less than 11 1-9 per cent., and less than  $16\frac{2}{3}$  per cent.

If (a) applies, the deduction from the amount of duty will be—(i) one-fourth of the amount of duty; or (ii)  $12\frac{1}{2}$  per cent. ( $\frac{1}{8}$ ) of the value for duty, whichever is the less:

If (b) applies, the deduction will be (i) one-eighth of the amount of duty; or (ii)  $6\frac{1}{4}$  per cent. of the value for duty, whichever is the less. The telegraphic transfer (buying) rate shall determine the extent of depreciation of Australian currency.

Prior to 1933-34 the Tariff Board had recommended rates of duty as though exchange was at par, but early in the year mentioned the Board decided to change the basis of its recommendations and has since shown its findings under the following headings:—

- (a) The rates which would prove reasonable and adequate under existing conditions of exchange.
- (b) An estimate as closely as can be made of the rates which would be reasonable and adequate if exchange suddenly reverted to par.
- (c) The scale of adjustment necessary to meet conditions of exchange between parity and the present adverse rate of 25 per cent.

In tariff proposals introduced on 6th December, 1934, and later, the new basis has been adopted in fixing rates of duty on certain items in accordance with the Board's recommendations as set out in (a) with provision for the adjustment of rates of duty as set out in (c). With respect to such items the deductions under the provisions of the Exchange Adjustment Act will cease to apply.

(iv) *Papua and New Guinea Preference.* The Customs Tariff (Papua and New Guinea Preference) Act 1936 which repealed the Act of 1934 provides for Customs Preference on goods the produce of Papua and on goods the produce of the Territory of New Guinea. Imports into Australia direct from the Territory of Papua or the Territory of New Guinea, of such of the goods specified in the schedule to the Act as were produced in the Territory from which they were imported, shall, notwithstanding anything contained in the Customs Tariff 1933-1939 be free of duty. The goods specified in the schedule to the Customs Tariff (Papua and New Guinea Preference) 1936 are coffee, dried lychee fruit, various native fresh fruits, edible fungi, green and dry ginger, coco-nuts, Rangoon beans, kapok and sesame seeds, areca nuts, cocoa beans, massoi oil, nuts (edible), sago, tapioca, spices, vanilla beans and gums. Total imports from Papua during 1939-40 amounted to £A577,442, including gold, £A109,551, imports of goods entitled to preference to £A73,086, and duties remitted to £A50,134. Total imports from the Territory of New Guinea during 1939-40 amounted to £A3,088,699, including gold £A2,848,582, imports of goods entitled to preference to £A105,206, and the duties remitted to £A54,770.

4. *Reciprocal Tariffs.*—(i) *General.* The Customs Tariff of 1921 provided a new feature in Australian Tariffs in the form of an intermediate tariff. No provision was made in the Customs Tariff 1933 for an intermediate tariff but in the Customs Tariff 1936 this feature was restored. The purpose of the intermediate tariff is referred to in par. 2 above.

The trade agreement signed at the Imperial Economic Conference, 1932, held at Ottawa, Canada, on behalf of the Government of the United Kingdom and of the Government of the Commonwealth of Australia materially altered the existing conditions of preference. The agreement provides special preferential trade conditions between the Commonwealth of Australia and the United Kingdom and certain of its dependencies. Customs Tariff 1933 embodied the main provisions of the Ottawa Agreement, and imposed duties of customs under two headings—British Preferential Tariff and General Tariff. No provision was made for an Intermediate Tariff in the abovementioned Act. The terms of the agreement conceded by the Commonwealth Government are briefly stated in par. 3 above and the concessions granted by the Government of the United Kingdom on goods of Australian origin are set out in par. 13 below of this chapter. A review of the trade agreement appears in the Appendix to Official Year Book No. 26.

(ii) *Dominion of Canada.* A reciprocal trade agreement between Canada and Australia which came into force on 1st October, 1925, was superseded by the Customs Tariff (Canadian Preference) Acts of 1931 and 1934-1939, which reaffirmed the principle of granting of preferences for the mutual advantage of the two countries and extended preferential conditions. The commodities on which Canada grants preferential rates of duty to Australia are: Butter, brandy, champagne, cheese, currants, eggs, eucalyptus oil, fresh apricots, pears, quinces, nectarines, grapes, oranges and passion fruit, dried prunes, apricots, nectarines, pears and peaches, fruit pulp, fruits in cans, gelatine, hops, rice (uncleaned), meat (fresh and canned), peanuts, raisins, sugar, tallow, veneers and wine. Australia's preferential duties apply to the following Canadian imports:—Carbide of calcium, cash registers, corsets, fish, gloves, goloshes and rubber sand boots, etc., iron and steel tubes or pipes, printing machinery, barbed wire, paper (printing, typewriting and writing), timber, typewriters, vacuum cleaners and vehicles—motor chassis (unassembled and assembled)—and vehicle parts but not including bodies, gears, rubber tyres and tubes, storage batteries, shock absorbers, bumper bars, sparking plugs and springs.

During 1939-40 the imports from Canada amounted in Australian currency to £A11,393,568 and imports of Canadian origin entitled to preference were valued at £A9,984,914, the principal items being printing paper, £A1,946,849; motor chassis and parts, £A1,878,301; timber, £A986,221; fish, £A531,590; and piece goods, £A429,786. The duty on the total imports of Canadian origin entitled to preference would have been £A3,197,086 under the General Tariff, but by the preferential provisions this was reduced by £A1,913,696, or by 19.2 per cent. on the value of the imports concerned.

Australian exports to Canada subject to preference amounted to approximately £A1,967,411, the principal items being fruits, dried, £A571,259; sugar, £A1,229,687; fruits, preserved, £A104,980; and tallow, £A61,485.

(iii) *Dominion of New Zealand.* The Customs Tariff (New Zealand Preference) Act 1933, which came into force on 1st December, 1933, repealed earlier Acts and provides that duties on all goods specified in the schedule to the Act shall be at the rates indicated therein, and that all goods other than those provided for in the schedule shall be subject to the rates in force under the British Preferential Tariff. An amendment to this Act in 1934 provides that, where the rate of duty upon any class of goods under the New Zealand British Preferential Tariff is less than that operating in Australia under the British Preferential rate, upon request by the New Zealand Government such goods may, after proclamation, be admitted at the lower rate. The rates of duty on goods re-exported from New Zealand (not being goods the produce or manufacture of New Zealand) and which are imported into Australia, and upon which if they had been imported into Australia direct from the country of origin would have been subject to the rates of duty under the British Preferential Tariff, shall be the rates of duty in force under that tariff.

The Act provides also that films produced in New Zealand by or for the Government of New Zealand for publicity purposes shall be admitted free of duty, also that cocoa beans the produce of Western Samoa shall not be subject to any higher duties than those paid on cocoa beans the produce of any British non-self-governing Colony or Protectorate or any Territory under British mandate. Nothing in the Act shall apply to goods being the produce of Cook Islands.

Goods the produce or manufacture of the Dominion of New Zealand are exempt from primage duty.

The conditions of preference in the Act provide that goods shall be deemed to be the produce or manufacture of New Zealand if they conform to the laws and regulations in force in Australia which apply to such goods when imported under the British Preferential Tariff (*vide* section 151A of Customs Act 1901-1930) except that goods not wholly produced or manufactured in New Zealand need not contain more than 50 per cent. of New Zealand labour and/or material in their factory or works cost, instead of 75 per cent. under the conditions of the United Kingdom preference.

Of the total imports of £A1,823,336 from New Zealand during 1939-40 it is estimated that goods otherwise dutiable amounting in value to £A405,450 were admitted free under the provisions of the Preferential Tariff and the duty thus remitted was £A169,368.



In addition, goods valued at £A49,217 were admitted under the preferential rates of duty, the duty remitted on such goods being £A10,291. The total of the duties remitted on the import of New Zealand goods was thus £A179,659, representing a margin of preference of 34.9 per cent. on the value of the goods entitled to preference. The principal items which benefited under the preferential provisions were fish, valued at £A115,482, and undressed timber, £A170,463, the amounts of duty remitted being £A22,782 and £A117,601 respectively.

(iv) *Newfoundland.* The Customs Tariff (Newfoundland) Preference Act 1939 which came into operation on 12th December, 1939, provided for imports of newsprinting paper, the produce or manufacture of Newfoundland to be accorded the benefits of the British Preferential Tariff and in return the Government of Newfoundland accorded exclusive Tariff preference to Australian butter and canned fruits imported into that country.

(v) *Southern Rhodesia.* The Customs Tariff (Southern Rhodesian Preference) Act 1941 came into operation on 9th April, 1941, provided for the imports of tobacco, unmanufactured, the produce of Southern Rhodesia, to be accorded the British Preferential Tariff rates less ninepence per pound.

(vi) *Union of South Africa.* A new trade agreement took effect from 1st July, 1935. This agreement provides that the products of the Union of South Africa or the mandated territory of South-West Africa entering Australia and the products of Australia entering the Union of South Africa or the mandated territory of South-West Africa shall be subject to customs duties not higher than those imposed by the importing country on like products from the most favoured foreign nation. A reciprocal tariff arrangement under which products of Mozambique are admitted duty free to the Union of South Africa is exempt from the agreement.

5. *Australian Trade Diversion.*—On 22nd May, 1936, the Minister directing negotiations for Trade Treaties announced in the House of Representatives the decision of the Government to divert portion of Australia's import trade, with the object of increasing exports of primary produce, expanding secondary industry, and bringing about an increase of rural and industrial employment.

Briefly summarized the Minister's statement indicated that certain imports would be restricted with a view to their manufacture in Australia, including motor chassis, which, it was hoped, would be made in Australia on a large scale within a few years. In the case of certain other imports it was intended to divert them from their present sources of supply to other countries which were great customers of Australia and which it was expected would become greater customers if Australia increased her purchases from them. The Government would proceed in two ways, firstly, by the adoption of a special licensing system over a limited range of imports and, secondly, by the imposition of higher duties where this course appeared more desirable. With the exception of motor chassis all goods of British origin would be exempt from the licensing system. In the case of motor chassis imports of United Kingdom origin only would be exempt from restriction. Upon application licences would be freely granted to countries with which Australia had a favourable balance of trade and to all other countries in regard to which, although the balance might be adverse to the Commonwealth, the Government was satisfied with the position.

The special licensing system was introduced on 23rd May, 1936, in the form of an amendment to the Customs (Prohibited Imports) Regulations which prohibited the import, except under special licence, of 84 classified groups of goods from foreign countries. On 7th December, 1937, the Minister for Trade and Customs announced important modifications of the licensing system and the intention to substitute adequate duties to protect Australian industries established or extended under the licensing system. These duties were imposed by Customs and Excise Resolutions of 4th May, 1938, and all licensing restrictions on the 84 groups of goods were removed from that date. Other references to this subject and to restrictions imposed on the import of motor chassis will be found in par. 2 above.

6. **Trade Agreements.**—(i) *General.* Trade agreements between the Commonwealth of Australia and the Governments of Belgium, Czechoslovakia, France, Japan and Switzerland were in operation prior to the outbreak of war in September, 1939, but now are inoperative owing to the provisions of the Trading with the Enemy Act 1939-1940. The full text of these agreements are shown in previous issues of the Official Year Book.

(ii) *Brazil.* A trade agreement concluded between the Governments of Brazil and the Commonwealth of Australia came into operation on 1st January, 1940. Briefly, the agreement provided :—

(1) Imports from Brazil would receive treatment not less favorable than that accorded to articles the produce or manufacture of any other foreign country.

(2) Imports from Australia would receive similar treatment.

Exceptions were made in regard to preferences or privileges granted for special reasons to particular countries.

7. **Australian-United States of America Trade Relations.**—The trade diversion policy of the Commonwealth Government as expressed by the prohibition, except under special licence, of specified imports as from 23rd May, 1936, adversely affected a wide range of goods from the United States of America, which for a number of years had enjoyed an extremely favourable trade balance with Australia. In reply to this action the United States Government withdrew as from 1st August, 1936, the most-favoured-nation treatment hitherto accorded to Australian goods including certain trade benefits extended to Australia equally with a number of countries with which the United States had concluded trade agreements. A further step bearing on the trade relations between the two countries was the extension by the Commonwealth Government to "Proclaimed Countries" as from 1st January, 1937, of intermediate customs tariff rates and certain primage duty concessions. The list of "Proclaimed Countries" includes the United Kingdom, the Dominions and Colonies, and the principal foreign countries. The principal exception was the United States of America which, however, was included by proclamations of 17th February, 1943.

The alteration in the system of import licensing restrictions, which had been in operation since 23rd May, 1936, and the substitution of increased rates of duty where such were considered necessary to provide adequate protection for Australian industries, resulted in the restoration, from 1st February, 1938, by the United States Government, of the accord to Australian goods of most-favoured-nation treatment.

As a result of the passing of the Lend-Lease Act in the United States of America the Australian Government took action to obtain from the United States of America, under the provisions of this Act, essential goods which were not available in sufficient quantities in this country or from the United Kingdom. (See § 3 Lend-Lease and Mutual Aid.)

On the outbreak of war with Japan, large quantities of war materials, raw products for the manufacture of munitions and other goods in short supply were made available to Australia under this Act. In recognition of the great material assistance received from the United States of America, the Australian Government, of its own volition, decided to accord to the United States of America the benefits of most-favoured-foreign-nation treatment. To implement this decision proclamations were made on 17th February, 1943, to include the United States of America in the list of "Proclaimed Countries" and to accord to that country intermediate Customs Tariff rates and primage duty concessions.

8. **Primage Duty.**—From 10th July, 1930, a primage duty of  $2\frac{1}{2}$  per cent. ad valorem was imposed on all goods whether dutiable or not dutiable, in addition to the duties collected in accordance with the Customs Tariff 1921-1930, excepting bullion, specie, radium and certain special governmental and other imports. The rate of primage duty was subsequently increased to 4 per cent. as from 6th November, 1930.

A proclamation of 14th May, 1931, exempted certain aids to primary production, and on 11th July, 1931, a further amendment, in addition to extending the list of these goods and also exempting some minor imports from primage duty,



provided for a rate of 4 per cent. ad valorem on a few other items, mainly aids to production, and increased the ad valorem rate of primage duty to 10 per cent. on all other articles imported. Amendments promulgated since 11th July, 1931, have greatly increased the list of goods exempt from primage duty.

The Customs Tariff (Primage Duties) Act 1934 imposed primage duty at rates of 4, 5, and 10 per cent. and provided for preferential treatment of certain goods admitted under the British Preferential Tariff. A proclamation of 12th December, 1934, exempted from primage duty goods the produce or manufacture of Fiji and a proclamation of 25th September, 1935, exempted from primage duty goods the produce or manufacture of the Territories of New Guinea and Papua. Under the Customs Tariff (New Zealand Preference) Act goods the produce or manufacture of New Zealand are exempt from primage duty. Similarly under the Norfolk Island Act 1913 goods the produce or manufacture of Norfolk Island are exempt from primage duty.

Customs proclamations, which came into force on 1st January, 1937, and later dates, provide in respect of specified tariff items exemptions from, and reduced rates of 4 and 5 per cent. primage duty on imports the produce or manufacture of "Proclaimed Countries". All countries whose goods are admissible to Australia under the intermediate customs tariff rank as proclaimed countries and include the United Kingdom, the Dominions and Colonies and most foreign countries. The United States of America was included by proclamation from 18th February, 1943. Japan is a proclaimed country for eleven items only.

In 1939-40 the value of goods from the United Kingdom admitted under British Preferential Tariff rates was, in Australian currency, £A47,668,186 and the primage duty paid, £A1,267,431. This amount is £A1,358,275 less than the amount which would have been paid if certain goods had not been subject to preferential rates of primage duty.

9. Customs (Import Licensing) Regulations.—The Customs (Import Licensing) Regulations, which were promulgated on 1st December, 1939, were originally applied only to imports from countries outside the sterling area. The primary object was to eliminate non-essential items from Australia's import trade with non-sterling countries in order to conserve foreign exchange.

Some items were placed on the totally prohibited list while others were limited to a percentage of either the value or quantity of imports in the pre-war year 1938-39. Certain classes of goods, such as machinery, which could not be conveniently rationed on a quota basis, were placed "under administrative control", each application being dealt with on its merits without reference to past importations.

The restrictions applied to the importation of non-essential goods have been progressively tightened since the regulations were first introduced and many more classes of goods have been added to the lists of items subject to "total prohibition" and "administrative control".

Since December, 1941, and consequent upon changes in the general war situation and the intensification of the Australian war effort, an increasing range of goods imported from the United Kingdom and other sterling countries has been brought within the scope of the licensing regulations. The extension of the restrictions to sterling goods is a necessary corollary to the measures adopted in Australia and throughout the British Commonwealth to divert man-power, machinery and raw materials to war production. Conservation of shipping space is also an important consideration.

The greater part of Australia's essential war-time requirements from the United States is now being supplied under lend-lease and licences authorizing commercial imports from that country are issued only in instances where the order is too small to be brought within the scope of lend-lease procedure or where other special circumstances exist. (See § 3 Lend-Lease and Mutual Aid.) The Customs (Import Licensing) Regulations are administered by the Division of Import Procurement, Department of Trade and Customs.

10. Export Control.—Apart from the normal measures for the control or supervision of exports, a number of special war-time control measures have been adopted following the outbreak of war with Germany in September, 1939.



Section 112 (1) of the Customs Act provides powers for the prohibition of the exportation of arms, explosives or military or naval stores, and of any goods—

- (a) the exportation of which would be harmful to the Commonwealth ;
- (b) the prohibition of the exportation of which is necessary for the preservation of the flora or fauna of Australia ;
- (c) in order to preserve the standard and quality of Australian goods for export ;
- (d) the prohibition of the exportation of which is necessary for the protection of the revenue or the prevention of fraud or deception.

Action has been taken under these powers to prohibit the exportation of a large range of goods and these prohibitions apply at all times. They may be general or restricted and absolute or conditional.

As regards the war-time control measures, regulations known as the Customs (Oversea Exchange) Regulations were promulgated under the Customs Act in September, 1939, primarily to control the exportation of capital in the form of goods. These regulations are complementary to action taken under the National Security Act to restrict, for the duration of the war, the movement out of Australia of capital in the form of securities, gold and currency, as such restriction would of course be ineffective if uncontrolled exports of goods were permitted.

The general aims of the regulations are to ensure—

- (a) that the oversea proceeds of exports from Australia are conserved for national purposes through the Australian banking system and the Commonwealth Bank of Australia ; and
- (b) that payment for goods exported to certain foreign countries is made by one of the methods approved by the Commonwealth Bank.

Under the regulations the exportation of any goods is prohibited unless—

- (a) a licence issued by the Department of Trade and Customs to export the goods is in force, and the conditions of the licence are complied with ; or
- (b) the goods are excepted from the application of the regulations.

A normal condition of a licence is that the relative shipping documents and bills of lading shall be drawn to the order of and delivered to the Commonwealth Bank of Australia or to an agent of that Bank. It is the responsibility of the licensee to observe this requirement which is known as the “ banking condition ” of the licence.

Other measures for war-time export control are designed to—

- (a) conserve supplies of goods for Australian requirements ;
- (b) implement price determinations ;
- (c) control exports of goods which have been disposed of under Empire marketing agreements ; or
- (d) augment the control of the movement of capital in the form of goods instituted under the Customs (Oversea Exchange) Regulations.

The powers for these control measures are taken under Section 112 (1A) of the Customs Act by the promulgation of proclamations prohibiting the exportation of the goods concerned except with the consent of the Minister for Trade and Customs. These prohibitions also may be general or restricted and absolute or conditional. Some 900 kinds or classes of goods have been proclaimed as prohibited exports under these powers.

In cases where consent to exportation is given an export permit known as a restricted goods permit is issued. Consent is freely given for the exportation of restricted goods to British and Allied countries if they are available for export. In the case of exports to neutral countries special precautions, apart from any other control measures, are taken to ensure that the goods do not become contraband by re-exportation to enemy territory, and to prevent any possible trading with the enemy. These special precautions include consignee control and guarantees against re-export.

**11. Special War Duty.**—This duty was imposed from 3rd May, 1940, as a war taxation measure. It comprises a tax of 10 per cent. on the Amount of Duties of Customs (which include Primage) on all goods (other than goods covered by Item 229 (c) in the Schedule to the Customs Tariff 1933-1939) entered for home consumption on and after

the date mentioned. The tax is not regarded as having any relationship to the Duties of Customs in the ordinary acceptance of the term, but the amounts collected appear under the heading "Customs Collections" in Chapter XVII. "Public Finance".

**12. Industries Preservation.**—The Customs Tariff (Industries Preservation) Act 1921-1936 provides that after inquiry and report by the Tariff Board, special duties shall be collected in the following cases when the importation of the goods referred to might be detrimental to an Australian industry :—In the case of goods sold for export to Australia at a price less than the fair market price for home consumption or at a price which is less than a reasonable price, a special dumping duty shall be collected equal to the difference between the price at which the goods were sold and a fair market price. Similar provision is made for goods consigned to Australia for sale. With regard to goods exported to Australia at rates of freight less than the normal rate of freight the dumping freight duty shall be—on goods carried free—the amount payable as freight at the normal rate ; and in the case of any other goods—an amount equal to the difference between the freight paid and the freight which would have been payable at the normal rate. Special duties are also imposed in the case of goods imported from countries whose currency is depreciated. Provision is also made for the protection of the trade of the United Kingdom in the Australian market from depreciated foreign currency.

The Act provides that the Minister for Trade and Customs, after inquiry and report by the Tariff Board, may publish a notice in the *Commonwealth Government Gazette* specifying the goods upon which special rates of duty under this Act shall be charged and collected. Several amendments of the Act were recommended by the Tariff Board and put into effect by the Customs Tariff (Industries Preservation) Act 1922. The Customs Tariff (Industries Preservation) Act 1933 repeals section 8 of Act 1921-1922 and provides new clauses relating to Exchange Special Duty.

**13. Preferential Tariff of the United Kingdom.**—(i) *General.* The Tariff of the United Kingdom provides Preferential Customs rates on certain goods where it is shown to the satisfaction of the Commissioners of Customs and Excise that such goods have been consigned from and grown, produced, or manufactured in the British Empire. Manufactured articles generally are not entitled to the preferential rates unless a specified percentage of their value is the result of labour within the British Empire. In the Budget submitted to the House of Commons during June, 1925, clauses dealing with increased Imperial preference on Empire-grown tobacco, preserved and dried fruits, jams and jellies, spirits, wine, sugar and hops were proposed and adopted. The new rates of duty took effect on 1st July, 1925, excepting that relating to hops, which came into operation on 16th August, 1925.

(ii) *Australian Preference.* The principal items of interest to Australia which are accorded preferential treatment under the Preferential Tariff of the United Kingdom are—Fruits, dried and preserved ; jam ; fruit pulp ; preserved milk ; wine and brandy. Conditions of preference to goods of Australian origin imported into the United Kingdom were revised in the trade agreement signed at the Ottawa Imperial Economic Conference. Increased preference was granted and the list of commodities entitled to preference was extended. This agreement provides that for eggs, poultry, butter, cheese and other milk products free entry for produce of Australia will be continued for three years certain. Article 2 of the agreement provides that the British Government will invite Parliament to pass the legislation necessary to impose on foreign goods specified in Schedule B, the duties of customs specified therein in place of the duties (if any) now leviable. The goods and duties in Schedule B are as follows :—Wheat in grain, 2s. per quarter ; (this duty was abolished as a result of the United Kingdom-United States of America trade agreement of 17th November, 1938. See sub-par. (iv) below) ; butter, 15s. per cwt. ; cheese, 15 per cent. ad valorem ; apples, raw, 4s. 6d. per cwt. ; pears, raw, 4s. 6d. per cwt. ; apples, canned, 3s. 6d. per cwt., in addition to duty in respect of sugar content ; other canned fruits, 15 per cent. ad valorem, in addition to duty in respect of sugar content ; dried fruits, now dutiable at 7s., 10s. 6d. per cwt. ; eggs in shell, (a) not exceeding 14 lb. per 120, 1s. per 120 ; (b) over 14 lb. but not exceeding 17 lb., 1s. 6d. per 120 ; (c) over 17 lb., 1s. 9d. per 120 ; condensed milk, whole, sweetened, 5s. per cwt., in addition to duty in respect of sugar content ; condensed milk, whole, not



sweetened, 6s. per cwt. ; milk powder and other preserved milk, not sweetened, 6s. per cwt. ; honey, 5s. per cwt. ; copper, unwrought, whether refined or not, in ingots, bars, etc., 2d. per lb. ; oranges, raw, 3s. 6d. per cwt. from 1st April, to 30th November ; grape fruit, raw, 5s. per cwt., from 1st April to 30th November, and grapes (other than hothouse) 1½d. per lb. from 1st February to 30th June. Schedule C provides that the margin of preference on wine not exceeding 27 degrees of proof spirit shall be 2s. per gallon.

The British Government undertake that the general ad valorem duty of 10 per cent. imposed by Section 1 of the Import Duties Act 1932 on the following foreign goods shall not be reduced except with the consent of the Commonwealth Government :—Leather, tallow, canned meat, zinc, lead, barley, wheaten flour, macaroni, dried peas, dressed poultry, casein, eucalyptus oil, meat extracts and essences, copra, sugar of milk, sausage casings, wattle bark, asbestos and dried fruits other than currants.

The duties provided on foreign wheat in grain, copper, lead and zinc are conditional on Empire producers continuing to offer these commodities on first sale in the United Kingdom at prices not exceeding the world price.

During the calendar year 1939 merchandise of Australian origin imported into United Kingdom amounted to £61,984,000. Of this total approximately £32,031,426 represented goods which received preferential tariff treatment over similar goods from foreign countries. If these goods had been subject to the duties imposed on foreign goods it is estimated that they would have paid approximately £5,503,227 more in duty. This represents a rebate of approximately 17.2 per cent. on the value of imports receiving preferential treatment. The main items receiving preference and the amount of the rebates were—Beef, frozen, £3,199,164 (rebate, £573,032) ; other meats, £1,569,246 (rebate, £172,126) ; sugar, £4,449,788 (rebate, £1,327,862) ; wine, £605,562 (rebate, £538,012) ; rice, £200,036 (rebate, £69,809) ; butter, £11,090,254 (rebate, £1,480,090) ; cheese, £958,333 (rebate, £63,889) ; apples, £1,645,285 (rebate, £300,105) ; raisins, £736,129 (rebate, £108,517) ; fruits, tinned, or bottled, £1,184,455 (rebate £296,114) ; lead, unwrought, £2,741,429 (rebate, £65,027) ; leather, £426,894 (rebate, £128,068). The above figures for imports have been obtained from the *Annual Statement of the Trade of the United Kingdom* 1939, and the rebate granted has been estimated from rates of duty shown in the Import Duties Act 1932, Ottawa Agreements Act 1932 and the other enactments mentioned above.

The declaration by the British Government (Schedule H of the agreement) provides for the regulation of imports of foreign meat into the United Kingdom and undertakes that no restriction will be placed upon the importation of any meat from Australia during the period (January 1933 to June 1934) named in the " agreed programme " which is set out in Schedule H.

The views of the Government of the United Kingdom on the imports of meat into the United Kingdom were the subject of a paper presented to the House of Representatives in April, 1935. In a memorandum on " The Live Stock Situation " issued as a White Paper in July, 1934, the United Kingdom Government called attention to the very serious decline which had taken place in 1932, 1933 and the first half of 1934, in the prices of fat and store cattle on the United Kingdom market. The decline was attributed in the main to the disproportionate fall of agricultural prices as the result of the world depression and the effect on the meat industry of the expansion of oversea production which in some cases was stimulated by the payment of subsidies. The United Kingdom Government added that it was clearly impossible for that Government to acquiesce in a situation which threatened ruin to the United Kingdom live stock industry and explained that the choice lay between :—

- (a) a drastic reduction of imports to the point necessary to sustain prices of United Kingdom live stock at a remunerative figure ; or
- (b) the introduction in agreement with oversea countries of a levy upon imports the proceeds of which would be available for the assistance of the home industry.

In the latter case, it was explained, the quantity of imports might either be left entirely free or subjected to such moderate regulation as might be thought necessary to prevent the market from breaking altogether. It was further pointed out that, without



the consent of the countries concerned, no duty could be imposed on Dominion meat before August, 1937, or on Argentine meat before November, 1936. Failing agreement on the payment of a levy on meat imports the United Kingdom Government would have no alternative but to take steps to regulate, during the currency of existing agreements, the quantity of imports to whatever extent was necessary to restore live stock prices to a remunerative level. In summing up the position the United Kingdom Government stated that it was the firm intention of His Majesty's Government in the United Kingdom to safeguard the position of the United Kingdom live stock industry.

The arrangements with the United Kingdom provide for importations of Australian meat to be regulated in accordance with the absorptive capacity of the United Kingdom market. Australian meat importations into the United Kingdom during 1935 to 1939 as compared with the Ottawa agreement year (1931-32) have been as follows :—

Year.				Chilled Beef.	Frozen Beef and Veal.	Frozen Mutton and Lamb.	Pork.
				Cwt.	Cwt.	Cwt.	Cwt.
1931-32	..	..	..	Nil	1,124,000	1,488,000	Nil
1935	..	..	..	228,000	1,468,000	1,784,000	147,000
1936	..	"	..	296,000	1,524,000	1,496,000	233,000
1937	..	..	..	452,000	1,948,000	1,883,000	234,000
1938	..	..	..	528,000	1,924,000	1,898,000	284,000
1939	..	..	..	430,000	2,029,000	1,029,000	311,000

Imports of mutton and lamb into the United Kingdom for the twelve-monthly period from 1st October, 1938, to 30th September, 1939, were reduced by 3 per cent. below the level of the preceding twelve months, this action having been taken by the United Kingdom Government in order to safeguard the stability of the market. This reduction applies to imports from New Zealand, while foreign supplies were reduced by 10 per cent. compared with the preceding year.

Exports of mutton and lamb from Australia for arrival in the United Kingdom during the six months ended June, 1939, totalled 1,318,177 cwt., and total exports for the twelve months from October, 1938, to September, 1939, were estimated at 1,713,000 cwt. As this figure is within the limits imposed, the reduction of imports did not involve any actual restriction on exports of mutton and lamb from Australia.

From 1st October, 1939, the United Kingdom Government agreed to purchase from Australia beef, mutton, lamb, veal, pork, and offals. Particulars of the contracts appear in Chapter XXVII. "Miscellaneous".

(iii) *United Kingdom-Argentina Trade Agreement.* In connexion with the supply of meat to the Mother Country it will be of interest to compare the terms of the United Kingdom-Argentina Trade Agreement which took effect from 20th November, 1936. This agreement provides for "minimum annual quantities" of Argentina meat to be imported into the United Kingdom as follows:—Chilled beef for year 1937 not less than the quantity imported in 1935 reduced by 138,700 cwt. For each of the years 1938 and 1939 not less than the quantity permitted in the preceding year reduced by 138,700 cwt. provided that the 1939 quantity shall be not less than 6,590,000 cwt. Frozen beef 124,600 cwt., pork 180,800 cwt., and canned beef 605,600 cwt. annually. Mutton and lamb for year 1937, 886,000 cwt. and for 1938, 797,400 cwt. In addition, customs duty has been imposed as follows:—Chilled beef  $\frac{3}{4}$ d. per lb.; frozen beef  $\frac{3}{4}$ d. per lb.; canned beef (excluding tongues) 20 per cent., and tongues 30 per cent. ad valorem; pork, mutton and lamb, free. If in any period Argentina is unable to supply the minimum quantities specified the United Kingdom Government may re-allocate the shortage among other countries. The agreement was to remain in force until 31st December, 1939, and thereafter until terminated by six months' notice.

(iv) *United Kingdom-United States of America Trade Agreement.* The trade agreement between the United Kingdom and the United States of America, signed on 17th November, 1938, was of much interest to Australia as a country dependent on

reasonable access to oversea markets for the disposal of its large surplus of agricultural products. In particular, the Commonwealth derived an interest in the United Kingdom-United States Agreement from the fact that the concurrence of the Dominions and India was sought in the modification of certain preferences, accorded by the United Kingdom under the Ottawa Agreements of 1932, in order to facilitate the satisfactory conclusion of the negotiations. The extent of the alterations in preferences to which the Commonwealth agreed was limited to:—

- (a) the abolition of the duty on foreign wheat imported into the United Kingdom,
- (b) a reduction in the duty on fresh apples during the period 15th August to 15th April and on fresh pears during the period August to January; the full duty to be maintained during the remaining months when the Australian supplies are principally marketed; and
- (c) reductions in the duties on honey and on the following fruits preserved in syrup, namely, apples, grape fruit, fruit salad, pineapples and loganberries.

In co-operating with the United Kingdom to the extent indicated the Commonwealth Government was actuated by the belief that the promotion of greater freedom in world trade as a result of the agreement between the United States and the United Kingdom would have an indirect but beneficial effect on the marketing of Australian export commodities.

14. **Tariff Board.**—The Tariff Board Act 1921-1934 provides for the appointment of a Tariff Board consisting of four members, one of whom shall be an administrative officer of the Department of Trade and Customs. This member may be appointed Chairman of the Board. Members of the Board are appointed for a term of not less than one year nor more than three years, and two members may be appointed as a Committee for making special inquiries. The purpose of the Tariff Board is to assist the Minister in the administration of matters relating to trade and customs. The more important matters which the Minister shall refer to the Board for inquiry and report include disputes arising out of the interpretation of any Customs or Excise Tariff; the necessity for new, increased or reduced duties; the necessity for granting bonuses; any proposal for the application of the British Preferential Tariff to any part of the British Dominions or any foreign country; and any complaint that a manufacturer is taking undue advantage of the protection afforded him by the tariff by charging unnecessarily high prices for his goods or acting in restraint of trade. The Minister may refer to the Board for inquiry and report the following matters:—the classification of goods under items of the Tariff that provide for admission under By-Laws; the determination of the value of goods for duty; the general effect of the working of the Customs Tariff and the Excise Tariff; the fiscal and industrial effects of the Customs laws of the Commonwealth; the incidence between the rates of duty on raw materials and on finished or partly finished products; and any other matter affecting the encouragement of primary and secondary industries in relation to the Tariff.

Inquiries conducted by the Board relating to any revision of the Tariff, any proposal for a bounty, or any complaints that a manufacturer is taking undue advantage of the protection afforded him by the Tariff shall be held in public, and evidence in such inquiries shall be taken in public on oath, unless any witness objects to giving any evidence in public which the Board is satisfied is of a confidential nature, when the Board may take such evidence in private. Evidence taken by the Board in connexion with any inquiry under the Customs Tariff (Industries Preservation) Act 1921-1936 shall be taken in public on oath.

The Annual Report of the Tariff Board reviews the work of the Board during the year ended 30th June, 1942. The Board furnished 34 reports to the Minister for Trade and Customs, and of these reports 3 related to matters on which public inquiries had been held, 3 on the question of bringing into operation deferred rates of duty, 24 following investigations made on behalf of the Department of War Organization of Industry and 4 on applications by various companies under the National Security (Capital Issues) Regulations.

With the exception of one reference under the Tariff Board Act 1921-1934 covering questions regarding the distillation of brandy in Australia, the work in hand on 1st July, 1942, related wholly to references received under Regulation 3A of the National Security (Inquiries) Regulations. Four such references were held, one of a confidential nature in respect of which work is proceeding; two of a general nature on which inquiry and reports had been completed for the time being; and, one dated 19th May, 1942, in respect of which the Board is at present conducting inquiries. In the last-mentioned reference the Minister for Trade and Customs called for investigation, report and recommendations from the Board in the following terms :—

On "all aspects of the general problem of the re-establishment of secondary industries as part of the Commonwealth post-war reconstruction plan. In particular it is desired that the Board investigate and make interim and final reports and recommendations on—

- (a) The extent to which it will be technically possible to adapt for civilian industry, plant, equipment, materials and man-power (male and female employees) employed in defence production, and to what extent (so far as can be foreseen) such adaptation is likely to be economically desirable.
- (b) The disposition of surplus plant, equipment and stores of materials from the defence and other industries after the war.
- (c) Any measures which may be required to facilitate the re-establishment after the war of industries or concerns contracted or closed down during the war.
- (d) To what degree will any proposals made solve the problem of the absorption into civil avocations of members of the Forces.
- (e) Changes in the organization and structure of Australian secondary industries since 1939 tending to increase industrial concentration, and any action arising therefrom that may be desirable in the interests of consumers.
- (f) The possible effects of developments in Australia and overseas on the Australian system of encouragement and protection to industry by Tariff and Bounty.
- (g) Other matters relating to the establishment, diversification, development and location of Australian secondary industries after the war."

The Annual Report of the Tariff Board shows that during the year 1942-43, fifteen reports had been furnished to the Minister; three of these related to matters which had been the subject of Public Inquiry; nine on post-war reconstruction of secondary industry; two on the question of bringing into operation deferred rates of duty and one on a matter of a confidential nature referred under regulation 3A of the National Security (Inquiries) Regulations. The only public hearings held by the Board during the year related to brandy distillation, the question of what differences should exist in rates of duty between hand and machine-made cigars in order to protect the hand-made cigar industry, and the manner in which the amount appropriated by the Dairy Industry Assistance Act 1942, should be allocated.

The remaining work of the Board arose from the reference made by the Minister of Trade and Customs under regulation 3A of the National Security (Inquiries) Regulations in connexion with the reconstruction of secondary industries as part of the Commonwealth plan for Post-war Reconstruction.

Under this reference no public inquiries have so far been held but have been conducted by means of interviews and discussions between the Board and representatives of industry. During the year 146 such interviews were held.

The work in hand on 1st July, 1943, related wholly to references received under regulation 3A of the National Security (Inquiries) Regulations.



The Minister for Trade and Customs on 14th December, 1932, referred to the Tariff Board for public inquiry and report the question as to the practicability of evolving some method of varying duties imposed under protective items of the Customs Tariff to meet the operation of exchange and primage. The recommendation of the Board regarding exchange adjustment was embodied in Customs Tariff (Exchange Adjustment) Act 1933. In regard to primage duty, the Board reaffirmed its recommendation to the Minister, dated 5th August, 1932, that primage duty should be removed from protective items in the Tariff Schedule, and suggested the adoption of such recommendation so soon as the Government considered that revenue considerations permitted.

**15. Trade Descriptions.**—The Commerce (Trade Descriptions) Act 1905 as amended by the Acts of 1926, 1930 and 1933 gives power to compel the placing of a proper description on certain prescribed goods, or on packages containing the same, being imports or exports of the Commonwealth. The goods to which a trade description must be applied are :—  
(a) Articles used for food or drink by man, or used in the manufacture or preparation of articles used for food or drink by man; (b) medicines or medicinal preparations for internal or external use; (c) manures; (d) apparel (including boots and shoes), and the materials from which apparel is manufactured; (e) jewellery; (f) seeds and plants; and (g) brushware.

**16. Acts passed in 1941 and 1942.**—The following Commonwealth Acts relating to Australian production and trade were assented to during the years 1941 and 1942 :—

#### ACTS PASSED IN 1941.

- Raw Cotton Bounty Act, No. 9 of 1941. An Act to amend the Raw Cotton Bounty Act 1940.
- Trade Agreement (Southern Rhodesia) Act, No. 10 of 1941. An Act to approve an Agreement between the Government of the Commonwealth of Australia and the Government of Southern Rhodesia.
- Customs Tariff (Southern Rhodesian Preference) Act, No. 13 of 1941. An Act relating to Duties of Customs.
- Customs Tariff Validation Act, No. 17 of 1941. An Act to provide for the Validation of Collections of Duties of Customs under Customs Tariff Proposals.
- Customs Tariff (Exchange Adjustment) Validation Act, No. 18 of 1941. An Act to provide for the Validation of Adjustments in Duties of Customs under Customs Tariff (Exchange Adjustment) Proposals.
- Customs Tariff (Special War Duty) Validation Act, No. 19 of 1941. An Act to provide for the Validation of Collections of Duties of Customs under Customs Tariff (Special War Duty) Proposals.
- Customs Tariff (Canadian Preference) Validation Act, No. 20 of 1941. An Act to provide for the Validation of Collections of Duties of Customs under Customs Tariff (Canadian Preference) Proposals.
- Customs Tariff (New Zealand Preference) Validation Act, No. 21 of 1941. An Act to provide for the Validation of Collections of Duties of Customs under Customs Tariff (New Zealand Preference) Proposals.
- Raw Cotton Bounty (No. 2) Act, No. 28 of 1941. An Act to amend the Raw Cotton Bounty Act 1940-41.
- Cable and Wire Bounty Act, No. 29 of 1941. An Act to provide for the Payment of Bounty on the Production of Rubber-insulated Cable and Rubber-insulated Wire.
- Customs Tariff Validation (No. 2) Act, No. 42 of 1941. An Act to provide for the Validation of Collections of Duties of Customs under Customs Tariff Proposals.
- Customs Tariff (Exchange Adjustment) Validation (No. 2) Act, No. 43 of 1941. An Act to provide for the Validation of Adjustments in Duties of Customs under Customs Tariff (Exchange Adjustment) Proposals.

- Customs Tariff (Special War Duty) Validation (No. 2) Act, No. 44 of 1941.  
An Act to provide for the Validation of Collections of Duties of Customs under Customs Tariff (Special War Duty) Proposals.
- Customs Tariff (Canadian Preference) Validation (No. 2) Act, No. 45 of 1941.  
An Act to provide for the Validation of Collections of Duties of Customs under Customs Tariff (Canadian Preference) Proposals.
- Customs Tariff (New Zealand Preference) Validation (No. 2) Act, No. 46 of 1941. An Act to provide for the Validation of Collections of Duties of Customs under Customs Tariff (New Zealand Preference) Proposals.
- Excise Tariff Validation Act, No. 47 of 1941. An Act to provide for the Validation of Collections of Duties of Excise under Excise Tariff Proposals.
- Superphosphate Bounty Act, No. 65 of 1941. An Act to provide for the Payment of a Bounty on Production of Superphosphate, and for other purposes.

#### ACTS PASSED IN 1942.

- Excise Act, No. 16 of 1942. An Act to amend the Excise Act 1901-1934.
- Dairy Produce Export Control Act, No. 24 of 1942. An Act to amend the Dairy Produce Export Control Act 1924-1938.
- Rabbit Skins Export Charges Act, No. 25 of 1942. An Act to amend the Rabbit Skins Export Charges Act 1940.
- Customs Tariff Validation Act, No. 36 of 1942. An Act to provide for the Validation of Collections of Duties of Customs under Customs Tariff Proposals.
- Customs Tariff (Exchange Adjustment) Validation Act, No. 37 of 1942. An Act to provide for the Validation of Adjustments in Duties of Customs under Customs Tariff (Exchange Adjustment) Proposals.
- Customs Tariff (Special War Duty) Validation Act, No. 38 of 1942. An Act to provide for the Validation of Collections of Duties of Customs under Customs Tariff (Special War Duty) Proposals.
- Customs Tariff (New Zealand Preference) Validation Act, No. 39 of 1942. An Act to provide for the Validation of Collections of Duties of Customs under Customs Tariff (New Zealand Preference) Proposals.
- Customs Tariff (Canadian Preference) Validation Act, No. 40 of 1942. An Act to provide for the Validation of Collections of Duties of Customs under Customs Tariff (Canadian Preference) Proposals.
- Dairying Industry Assistance Act, No. 58 of 1942. An Act to provide for the granting of Assistance to the Dairying Industry with the object of aiding the Prosecution of the War, and for other purposes.

### § 3. Lend-Lease and Mutual Aid between Australia and The United States.

1. *Lend-Lease.*—(i) *The Pre Lend-Lease Period.*—As a result of the disturbance of customary sources of supply following the outbreak of war Australia sought more and more of her essential import requirements from the United States. Apart from military equipment the growth in the local war production programme made it necessary to import large quantities of machine tools, raw materials, and components which were unprocurable locally. Many former sources of these essential requirements had fallen into enemy hands. Although still the largest supplier of essential goods to Australia, the United Kingdom now had become unable to export many of the goods which she formerly supplied. Thus, prior to the passage of the United States Lend-Lease Act, Australia was already buying on an unprecedented scale in the United States.

(ii) *Background to the Passage of the United States Lend-Lease Act.*—The United States Lend-Lease Act arose out of the exhaustion of the dollar reserves of the British Commonwealth. Towards the end of 1940 it was apparent that dollar exchange could no longer be provided to cover the contracts for munitions and other war materials necessary to enable the British Commonwealth to prosecute the war against the Axis powers. Practically all the important units of the Empire had already taken steps to eliminate the importation of commodities required for non-essential purposes and the scope for further economies was strictly limited. The extent of the commitments already entered into with the United States manufacturers was so great that not only were existing dollar and gold reserves used up, but future dollar earnings were heavily mortgaged. To meet this situation the United States Administration evolved the principles embodied in the Lend-Lease Act.

(iii) *The Basic Principle of the Lend-Lease Act.*—The United States Lend-Lease Act which became effective on 11th March, 1941, empowers the United States Government to assist Foreign Governments, whose defence the President deems vital to the defence of the United States, by supplying them with the goods and services which they require for war purposes. The aid which may be made available under the terms of the Act includes not only finished munitions such as planes, tanks, guns, ammunition and other military equipment, but also raw materials, foodstuffs and other articles required for the war effort of the recipient countries. The Act provides that the terms and conditions upon which any Foreign Government receives Lend-Lease aid shall be those which the President deems satisfactory and “the benefit to the United States may be payment or repayment in kind or property or any other direct or indirect benefit”.

(iv) *The Duration of the Lend-Lease Act.*—The original Lend-Lease Act provided that the powers given to the United States Government to grant lend-lease aid to other countries should terminate on 30th June, 1943. Later Acts of Congress have extended the operation of the Lend-Lease Act to 30th June, 1945.

2. *The Mutual Aid Agreement.*—A Mutual Aid Agreement between the United States and the United Kingdom was signed on 23rd February, 1942, and this was applied to Australia on 3rd September, 1942. The text of the Agreement is as follows :—

“Whereas the Governments of the United Kingdom of Great Britain and Northern Ireland and the United States declare that they are engaged in a co-operative undertaking, together with every other nation or people of like mind, to the end of laying the bases of a just and enduring world peace securing order under law to themselves and all nations ;

And whereas, the President of the United States has determined, pursuant to the Act of Congress of the 11th March, 1941, that the defence of the United Kingdom against aggression is vital to the defence of the United States ;

And whereas the United States has extended and is continuing to extend to the United Kingdom aid in resisting aggression ;

And whereas it is expedient that the final determination of the terms and conditions upon which the Government of the United Kingdom receives such aid and of the benefits to be received by the United States in return therefor should be deferred until the extent of the defence aid is known and until the progress of events makes clearer the final terms and conditions and benefits which will be in the mutual interests of the United States and the United Kingdom and will promote the establishment and maintenance of world peace ;

And whereas the Governments of the United States and the United Kingdom are mutually desirous of concluding now a preliminary agreement in regard to the provision of defence aid and in regard to certain considerations which shall be taken into account in determining such terms and conditions, and the making of such an agreement has been in all respects duly authorized, and all acts, conditions and formalities which it may have been necessary to perform, fulfil or execute prior



to the making of such an agreement in conformity with the laws either of the United States or of the United Kingdom have been performed, fulfilled or executed as required ;

The undersigned (Mr. Sumner Welles and Lord Halifax) being duly authorized by their respective Governments for that purpose, have agreed as follows :—

Article I. The Government of the United States will continue to supply the Government of the United Kingdom with such defence articles, defence services, and defence information as the President shall authorize to be transferred or provided.

Article II. The Government of the United Kingdom will continue to contribute to the defence of the United States and the strengthening thereof and will provide such articles, services, facilities or information as it may be in a position to supply.

Article III. The Government of the United Kingdom will not without the consent of the President of the United States transfer title to, or possession of, any defence article or defence information transferred to it under the Act or permit the use thereof by any one not an officer, employee or agent of the Government of the United Kingdom.

Article IV. If, as a result of the transfer to the Government of the United Kingdom of any defence article or defence information, it becomes necessary for that Government to take any action or make any payment in order fully to protect any of the rights of a citizen of the United States who has patent rights in and to any such defence article or information, the Government of the United Kingdom will take such action or make such payment when requested to do so by the President of the United States.

Article V. The Government of the United Kingdom will return to the United States at the end of the present emergency, as determined by the President, such defence articles transferred under this agreement as shall not have been destroyed, lost or consumed and as shall be determined by the President to be useful in the defence of the United States or of the Western Hemisphere or to be otherwise of use to the United States.

Article VI. In the final determination of the benefits to be provided to the United States by the Government of the United Kingdom full cognizance shall be taken of all property, services, information, facilities, or other benefits or considerations provided by the Government of the United Kingdom subsequent to 11th March, 1941, and accepted or acknowledged by the President on behalf of the United States.

Article VII. In the final determination of the benefits to be provided to the United States by the Government of the United Kingdom in return for aid furnished under the Act of Congress of the 11th March, 1941, the terms and conditions thereof shall be such as not to burden commerce between the two countries, but to promote mutually advantageous economic relations between them and the betterment of world-wide economic relations. To that end they shall include provision for agreed action by the United States and the United Kingdom, open to participation by all other countries of like mind, directed to the expansion, by appropriate international and domestic measures, of production, employment, and the exchange and consumption of goods, which are the material foundations of the liberty and welfare of all peoples ; to the elimination of all forms of discriminatory treatment in international commerce, and to the reduction of tariffs and other trade barriers ; and, in general, to the attainment of all the economic objectives set forth in the joint declaration made on the 12th August, 1941, by the President of the United States and the Prime Minister of the United Kingdom.

At an early convenient date, conversations shall be begun between the two Governments with a view to determining, in the light of governing economic conditions, the best means of attaining the above-stated objectives by their own agreed action and of seeking the agreed action of other like-minded Governments.

Article VIII. This agreement shall take effect as from the date of signature (23rd February, 1942). It shall continue in force until a date to be agreed upon by the two Governments."

3. **Australia-United States Reciprocal Aid Agreement.**—An agreement was concluded at Washington on 3rd September, 1942, between the United States and Commonwealth Governments defining the undertaking of each Government to make available to the other, on lend-lease terms, material aid for the prosecution of the war. The agreement is in the form of an exchange of notes between the Australian Minister at Washington (Sir Owen Dixon) and the United States Secretary of State (Mr. Cordell Hull).

The agreement affirms the general principle that the war production and war resources of both nations should be used by the armed forces of each in the ways which most effectively utilize available materials, man-power, production facilities and shipping space. It states specifically that the United States Government will continue to provide such aid to Australia on lend-lease terms in accordance with the Lend-Lease Act of the 11th March, 1941. Reciprocally, it defines the principles on which Australian aid is in turn to be made available to the United States.

As regards the reciprocal undertaking by Australia, the immediate occasion for the agreement arose from the arrival of United States armed forces in Australia soon after the entry of Japan into the war. As early as February, 1942, the Commonwealth Government had made known in Washington its readiness to discuss with the United States Government the provision on lend-lease terms of supplies and equipment, which had already been, and would in future be, made available out of Australian resources to the United States forces in Australia.

The agreement provides that as large a portion as possible of the articles and services which each Government may authorize to be provided to the other shall be in the form of reciprocal aid, that is on lend-lease terms, so that the need of each Government for the currency of the other may be reduced to a minimum.

Thus the Commonwealth will, in accordance with its potentialities and responsibilities, authorize the provision on lend-lease terms of the following types of assistance to the armed forces of the United States in Australia or its Territories and in such other cases as may be determined by common agreement:—

Military and naval stores, equipment and munitions. Other supplies, material, facilities and services of United States forces, except for pay and allowances and administrative expenses of such forces. Supplies, materials and services needed in the construction of military works.

In addition, the note addressed by the Australian Minister to the Secretary of State declares, on behalf of the Commonwealth Government, that Australia accepts the principles contained in the Mutual Aid Agreement concluded between the United States and the United Kingdom Governments on the 23rd February, 1942, as governing also the provision of mutual aid between the United States and Australia. In this way Australia is formally included in the framework of the arrangements made by the United States Government in accordance with the Lend-Lease Act 1941 with others of the United Nations which are in receipt of United States Lend-Lease assistance.

4. **Procedure by which Australia receives Lend-Lease Aid.**—(i) *General.* Two organizations have been set up by the Commonwealth Government to handle the procurement of lend-lease supplies from the United States. The first, operating in

Australia, is the Division of Import Procurement, which was set up within the Department of Trade and Customs in September, 1941. The second, which functions in Washington, is the Australian War Supplies Procurement Office established in December, 1941.

(ii) *Procedure in Australia.* The advent of lend-lease made it necessary to set up a Government organization to act as the Central Clearing House for co-ordinating orders in order that bulk requisitions covering all Australian requirements of the commodity in question might be submitted to the United States Government for consideration. It was also necessary to establish an organization to handle the receipt and distribution of lend-lease goods supplied to the Commonwealth Government by the United States Government. These functions are carried out by the Division of Import Procurement which also maintains the central records of all lend-lease transactions including those relating to requisitions for military equipment and production materials placed through the Service Departments and the Departments of Munitions and Aircraft Production.

All Australian lend-lease requisitions are presented to the United States Lend-Lease Mission in Australia and to the Commander-in-Chief, South-West Pacific Area, for their approval before they are dispatched to Washington for submission to the United States Administration.

(iii) *Procedure in the United States.* Prior to the passage of the Lend-Lease Act an Australian Division of the British Purchasing Commission had been established in New York to handle Australian Government purchases in the United States. This organization handled the negotiation of contracts with American manufacturers and the technical details of procurement. The accounting and financial side of the transactions was dealt with by the Australian Government Trade Commissioner's Office in New York.

This procedure carried over into the initial lend-lease period, but as lend-lease transactions are inter-governmental transactions of a character quite different from ordinary commercial contracts, the Government decided in December, 1941, to bring all sections of Lend-Lease and Supply work into a single organization under unified control, with head-quarters in Washington. The new organization was designated "Commonwealth of Australia—War Supplies Procurement" and Mr. L. R. Macgregor, formerly Australian Government Trade Commissioner in North America, was placed in charge with the title of Director-General.

The Australian War Supplies Procurement organization receives Australian requisitions after they have been approved by the United States Lend-Lease Mission in Australia and the Commander-in-Chief, South-West Pacific Area, and lodges them with the United States Office of Foreign Economic Administration in Washington through the British Supply Council which acts as the central channel for the submission of all British Empire requisitions.

The United States Office of Foreign Economic Administration, when it approves a requisition, passes it out to one of the five United States Government Departments charged with the actual work of procurement. These five Departments are the War Department, the Navy, the Maritime Commission, the Department of Agriculture and the Procurement Division of the United States Treasury. These Procurement Departments arrange the necessary contracts with the United States manufacturers and when the goods are ready for delivery, hand them over to the British Ministry of War Transport which supervises their shipment to Australia in collaboration with the Australian representatives in the United States.

A different procedure is followed for finished munitions which are subject to assignment by the Combined Munitions Assignment Board. The Branch of the Board which functions in Washington assigns the finished munitions coming off the production lines in the United States to the various theatres of war in accordance with the overall strategic requirements of the war situation.

With the setting up of the Combined Munitions Assignment Board it became necessary to strengthen Australian Service representation in the United States and an Australian Military Mission and an Australian Air Mission have now been established in Washington. Broadly speaking, the function of the Service Missions is to ensure



that Australian requirements of Army and Air Force equipment are adequately presented to the Combined Munitions Assignment Board and to follow up all such requirements as far as the assignment stage. Once assignment has been made Australian War Supplies Procurement assists the Service Missions in the recording, accounting and shipping side of the work.

(iv) *Distribution of Lend-Lease Goods.* In its general policy regarding the distribution of lend-lease goods received, the Commonwealth Government is guided by the principles laid down in the United Kingdom Memorandum of 10th September, 1941, on export policy and the distribution of lend-lease goods. The basic principle embodied in this Memorandum is that all goods obtained under the Lend-lease Act will be used for the prosecution of the war effort and that they will not in any case be diverted to the furtherance of private interests. Where distributors are employed an undertaking is given that whatever the method of distribution, the remuneration received by the distributors will be no more than a fair return for the services rendered. Any opportunity for speculative profit by private interests in dealing with lend-lease goods is rigorously excluded.

Tentative figures which have been compiled by the United States Office of Foreign Economic Administration showed that the total value of goods and services supplied to Australia under lend-lease up to the end of December, 1943, was \$741,000,000. Australian Departmental records of the goods received under lend-lease show that the percentages of the various categories of material were as follows :—

	Per cent.
Direct War Materials .. .. .	45.6
Petroleum Products .. .. .	12.5
Transportation Equipment .. .. .	11.8
Machinery and Tools .. .. .	8.0
Metals .. .. .	6.7
Textiles and Textile Raw Materials .. .. .	4.9
Other Items .. .. .	10.5
	<hr/> 100.0 <hr/>

5. *Procedure by which Reciprocal Lend-Lease Aid is given by Australia.*—In order that no delay shall occur in providing the goods and services required by the United States Forces, which are eligible for Reciprocal Lend-Lease treatment, the Department of the Treasury made arrangements for the United States Demanding Authority directly to approach the appropriate Australian Government Departments. A reasonably wide and general authority has been given to these Departments to provide supply or service demanded by the United States Forces. This policy has enabled United States requirements to be met from available resources with a minimum of time in making official decisions on supply and provision of funds.

Eligibility for any supply or service as Reciprocal Lend-Lease has been interpreted liberally and on point of availability, United States forces have enjoyed an equal priority with Australian Forces and in some instances have received preference.

6. *Scope of Reciprocal Lend-Lease Aid given by Australia.*—In pursuance of the exchange of notes referred to in paragraph 3 between the Australian Government and the Government of the United States, extensive assistance has been provided to the United States Forces as Reciprocal Aid.

The following items indicate the extent of this assistance but the list is to be taken as illustrative of scope rather than inclusive of every type of supply or service :—

*Rations, Camp Stores, &c.* During 1942 and for the early part of 1943 the Australian Army Supply and Transport Service provided and distributed a full ration scale for all the American Forces. Subsequently, the United States Army made its own ration supply arrangements and it now procures its food supplies in bulk through the Department of Commerce and Agriculture.

The estimated quantities of the main items of foodstuffs supplied to 30th April, 1944, were:—

Meat .. .. .	71,700 long tons.
Bread, Biscuits and Cereals (including flour)	99,500 " "
Potatoes .. .. .	33,000 " "
Vegetables and Fruit .. .. .	95,100 " "
Sugar .. .. .	22,000 " "
Butter .. .. .	11,000 " "
Milk (condensed and evaporated) .. .. .	17,700 " "
Milk .. .. .	39,000,000 pints.
Eggs .. .. .	38,800,000 dozen.

*General Supplies.* The Contracts Board, Department of Supply and Shipping, has dealt with a very wide variety of items for direct supply to the United States Forces. Items supplied include uniforms and clothing, boots, machinery, motor vehicles and an extensive range of general stores and equipment.

Statistical details of the major items of clothing made available to the United States Forces up to 30th April, 1944, are as follows:—

Item	Number Ordered.	Number Delivered.	Number Outstanding.
Caps and Hats .. .. .	289,946	207,346	82,600
Gloves .. .. .	537,000 pairs	400,000 pairs	137,000 pairs
Helmets, Tropical .. .. .	34,000	34,000	..
Headnets, Mosquito .. .. .	757,600	242,600	515,000
Jackets .. .. .	327,000	315,156	11,844
Shirts .. .. .	652,383	488,597	163,786
Socks .. .. .	9,600,302 pairs	8,563,896 pairs	1,036,406 pairs
Sweaters .. .. .	211,000	211,000	..
Underwear (Male) .. .. .	461,000	461,000	..
Ties .. .. .	1,235,000	1,235,000	..
Blankets .. .. .	1,795,760	1,661,300	134,460
Boots and Shoes .. .. .	1,416,000	918,000	488,000
Trousers and Shorts .. .. .	287,458	265,396	22,062
Boot and Shoe Repair materials pieces .. .. .	8,621,200	3,520,670	5,100,530

*Ships.* A large number of harbour craft and coastal vessels have been either purchased or chartered for the United States Army. In addition, an extensive programme of construction of small craft of the tug, barge, and lighter type is in hand by the Australian Shipbuilding Board.

*Repairs of Aircraft, Vehicles and Ships.* Provision has been made for essential repairs to United States ships which have suffered damage, and for the servicing of United States aircraft engines and airframes (including the provision of such spares as are locally available). Costs under this heading are already heavy and are likely to increase substantially.

*Stevedoring and Port Services.* Arrangements have been concluded whereby all United States vessels carrying cargo for their Forces or the Australian Government are provided with free port service, stevedoring, etc.

*Rail, Air and Sea Transportation.* The United States Authorities have been placed in the position where they can demand rail, air and sea transportation for service goods and personnel, the accounts being paid by the appropriate Australian Department on certification of service by the United States Authorities.

*Communications.* The Postmaster-General's Department provides telephone, telegraph and teleprinter services in Australia, and in addition, external cable and wireless charges.

*Accommodation.* Apart from construction of camps, aerodromes, stores, etc., there has been hired for the United States Forces a large number of buildings in various localities for use as office, store, hospital, etc., accommodation.

*Operation of United States Transport Aircraft by Civil Airline Companies.* Approval has been given whereby certain United States transport aircraft are operated by civil airline companies and the cost charged to Reciprocal Lend-Lease. In addition, Australian civil airline planes have been provided to the United States Forces under charter arrangements.

*General Services.* All Departments provide a wide range of stores and service on United States account. The Department of Air, e.g., supplies general and maintenance stores, including spare parts for aircraft. The Department of the Army supplies include artillery and ammunition as well as general stores and equipment and medical stores. The Department of the Navy have supplied considerable quantities of general pattern stores and provided a wide range of service for ships of the United States Navy.

*Capital Works.* The Works programme covers construction of aerodromes with ancillary buildings and services, aircraft assembly and repair depots, storage depots, camp and hospital accommodation, wharf facilities with the usual engineering services in the way of roads, railway connexions, water supply sewerage, electric light, etc. Some of the programme represents works which are for joint Australian-United States use and the apportionment of this has not yet been made.

The total recorded Reciprocal Lend-Lease expenditure by Australia to the 30th June, 1944, was £169.4 millions, made up as follows:—

	£
Financial year 1941-42 .. .. .	6.5 million.
Financial year 1942-43 .. .. .	59.0 million.
Financial year 1943-44 .. .. .	103.9 million.
Total .. .. .	169.4 million.

7. *Procedure Adopted by Australia in Assessing Reciprocal Lend-Lease Aid.*—Costing of Reciprocal Lend-Lease is not precise and there are many services of a general character which do not lend themselves to valuation or which could only be valued as a result of a very complicated sub-division of the time of departmental personnel and of various maintenance and capital expenditures. The departmental accounting systems are not geared to readily provide such an apportionment and to obtain precision in Reciprocal Lend-Lease accounting would involve a great deal of labour for doubtful compensating advantages.

The object of the Treasury has been to avoid loading our administration with a mass of detailed accounting work in connexion with Reciprocal Aid. The main purpose has been to provide a system which will permit quick decision on procurement. Direct expenditure is charged as incurred but other costs involving apportionment will need to be assessed on very broad lines, and, in many cases, are not recorded in values at all. The apportionment of expenditure on capital works, which are for the joint use of both United States and Australian Forces in particular represents a different problem which can only be approached on the basis of a broad, probably arbitrary, assessment.

## § 4. Method of Recording Imports and Exports.

1. *Value of Imports.*—The recorded value of goods imported from countries beyond Australia as shown in the following tables represents the amount on which duty is payable or would be payable if the duty were charged ad valorem. The value of goods is taken to be 10 per cent. in advance of their fair market value in the principal markets of the country whence the goods were exported. Acting upon a recommendation of the Tariff Board the section of the Customs Act relating to the valuation of imports was amended, and section 154 (1) of the Customs Act 1901-1936 now provides that “when any duty is imposed according to value, the value for duty shall be the sum of the following:—

- (a) (i) the actual money price paid or to be paid for the goods by the Australian importer plus any special deduction, or
- (ii) the current domestic value of the goods, whichever is the higher;
- (b) all charges payable or ordinarily payable for placing the goods free on board at the port of export; and



- (c) ten per centum of the amounts specified under paragraphs (a) and (b) of this sub-section.

"Current domestic value" is defined as "the amount for which the seller of the goods to the purchaser in Australia is selling or would be prepared to sell for cash, at the date of exportation of those goods, the same quantity of identically similar goods to any and every purchaser in the country of export for consumption in that country".

Imports are recorded in British currency values, and Section 157 of the Customs Act provides that when the invoice value of imported goods is shown in any currency other than British currency, the equivalent value in British currency shall be ascertained according to a fair rate of exchange to be declared in case of doubt by the Minister. Under this section it was the practice of the Department of Trade and Customs, until 8th December, 1920, to convert on the basis of the mint par of exchange. Since the date mentioned, in consequence of a ruling of the High Court, all conversions have been based on the commercial rates of exchange.

The term "British currency values" is not exactly synonymous with "English sterling", since imports already expressed in terms of £ s. d. are regarded for duty purposes as being expressed in British currency values. This exception to the general rule is chiefly important in the case of imports from Fiji, New Zealand, and the Union of South Africa when their currencies are not at par with English currency. In all the tables in this volume no correction has been made on this account, even when for the sake of brevity the term "sterling" has been used as a contraction for "British currency values".

2. Value of Exports.—Prior to 1st July, 1929, the recorded value of all goods exported was taken as representing the value in the principal markets of Australia in the ordinary commercial acceptance of the term. Owing to the inflated values arbitrarily allotted in recent years to commodities which are subject to governmental control or subsidy, some change in the practice of valuation of exports of such commodities became desirable. Accordingly a new basis was adopted as from 1st July, 1929, for the statistical valuation of exports of sugar, butter and goods on which bounty or rebate was paid which would show for (a) *Sugar*—the value f.o.b. at which sold to oversea buyers, or a f.o.b. value equal to the London market price if shipped on consignment; (b) *Goods on which bounty or rebate was paid on export*—the value in the principal markets of Australia in the ordinary commercial acceptance of the term, less the value of any bounty or rebate. Until 31st March, 1934, the basis adopted for the value of exports of butter was the current market value, less the amount paid as export bonus. From 31st March, 1934, to 30th June, 1937, the basis was (a) sold in Australia for export—the f.o.b. equivalent of the price at which the butter was sold and (b) shipped on consignment—the f.o.b. equivalent of the ruling price overseas.

From 1st July, 1930, to 30th June, 1937, the basis adopted for the value of *wool* exported was (a) sold in Australia for export—the actual price paid plus the cost of services incurred in placing the wool on board ship, and (b) shipped on consignment—the f.o.b. equivalent of ruling Australian prices.

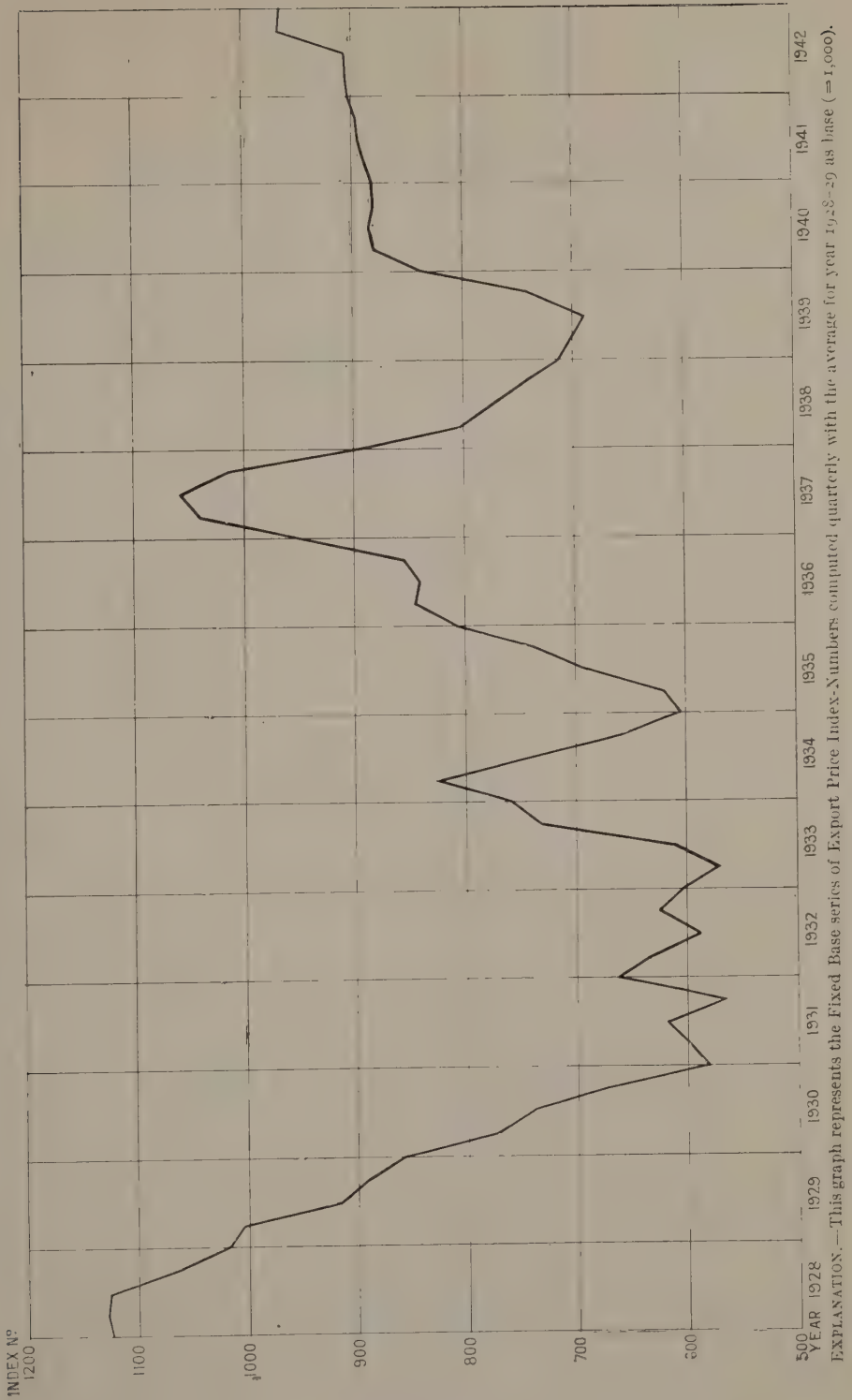
From 1st July, 1932, to 30th June, 1937, the basis adopted for the value of *wheat* exported was (a) sold in Australia for export—the f.o.b. equivalent of the price at which the wheat was sold, and (b) shipped on consignment—the f.o.b. equivalent of the current selling price overseas.

From 1st July, 1934, to 30th June, 1937, the basis adopted for the value of *flour* exported was (a) sold in Australia for export—the f.o.b. equivalent of the price at which the flour was sold, and (b) shipped on consignment—the f.o.b. equivalent of ruling Australian prices.

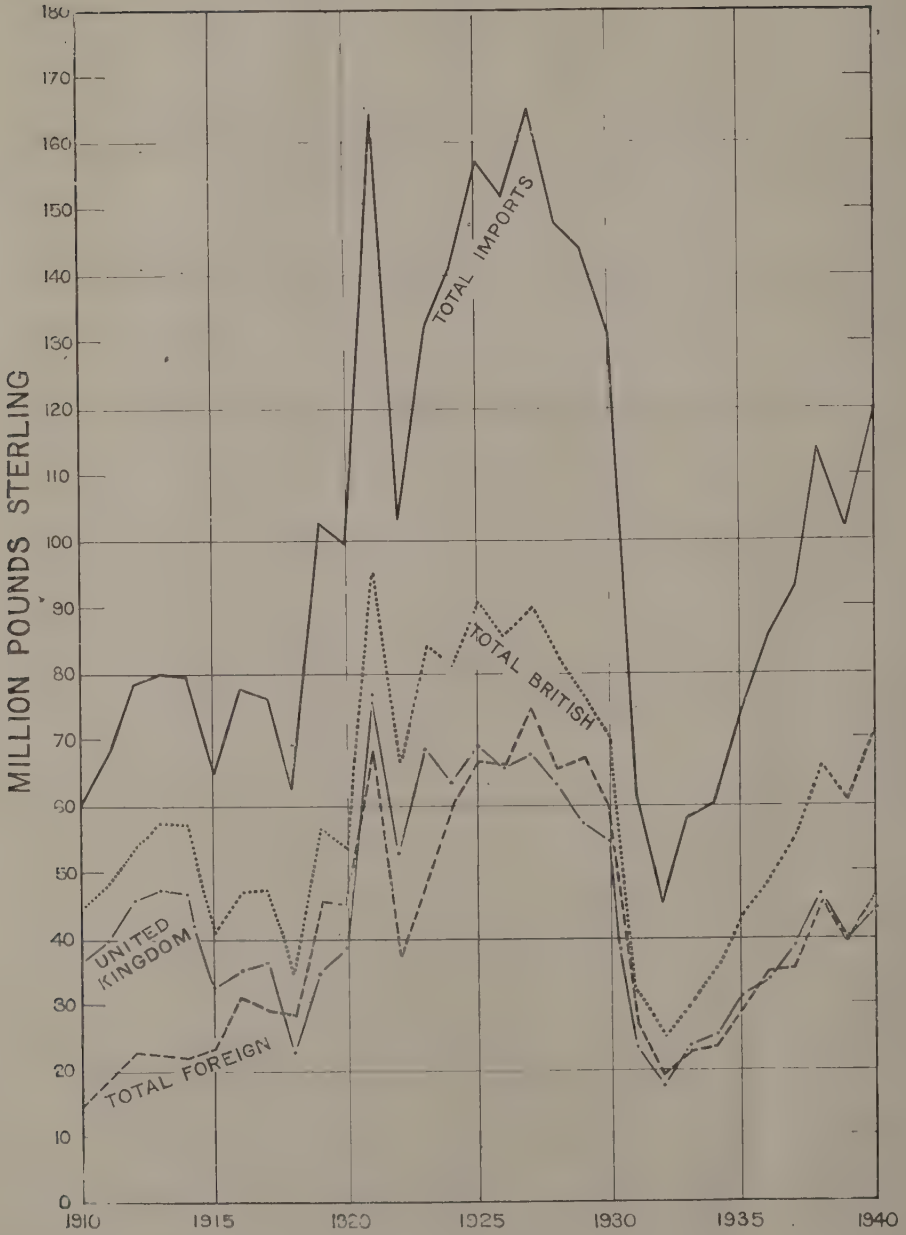
Since 1st July, 1937, the following revised definitions of f.o.b. values have been adopted for exports generally :—

- (1) Goods sold to oversea buyers before export—the f.o.b. equivalent of the price at which the goods were sold (e.g. as regards wool, the actual price paid by the oversea buyer plus the cost of all services incurred by him in placing the wool on board ship).

## EXPORT PRICES INDEX-NUMBERS—AUSTRALIA, 1928 TO 1942.

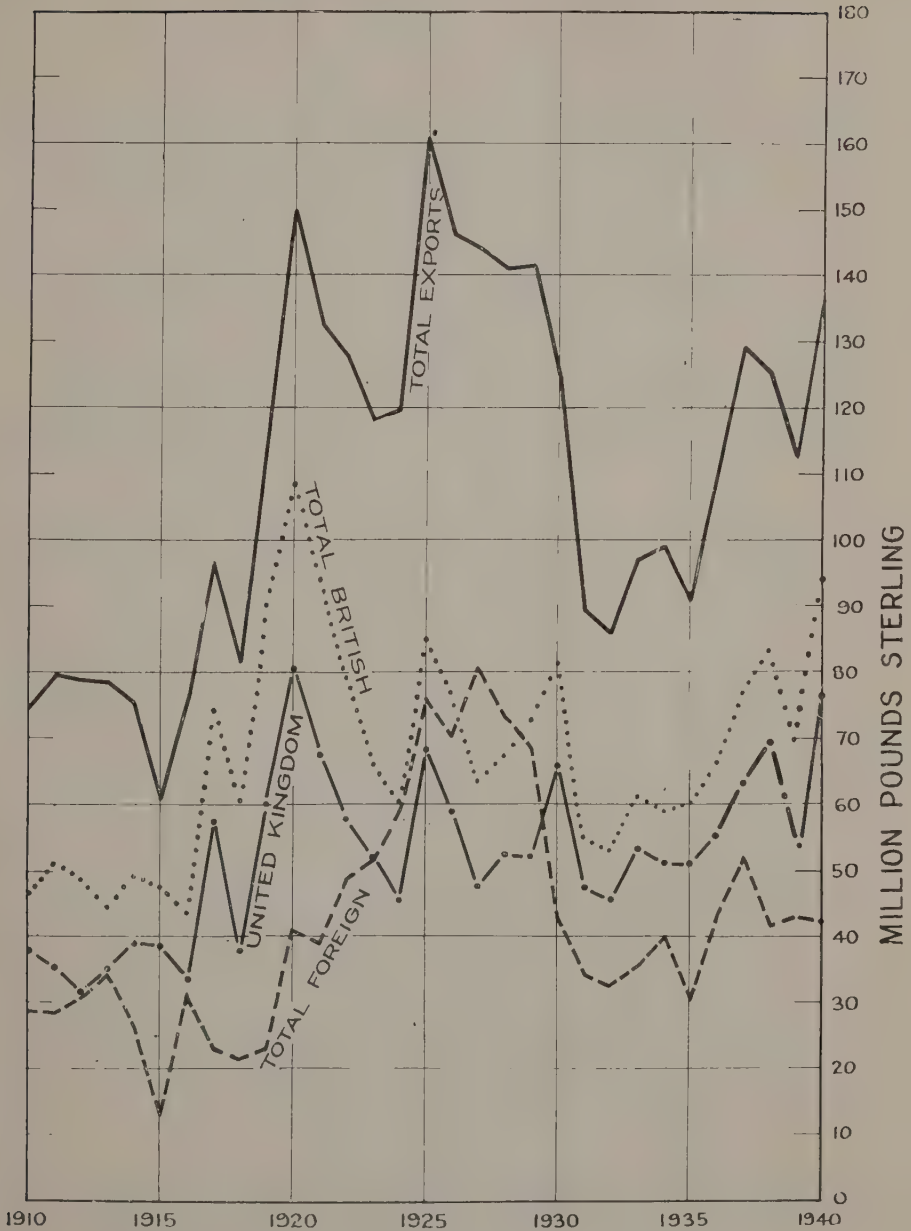


IMPORTS INTO AUSTRALIA, 1910 TO 1940.

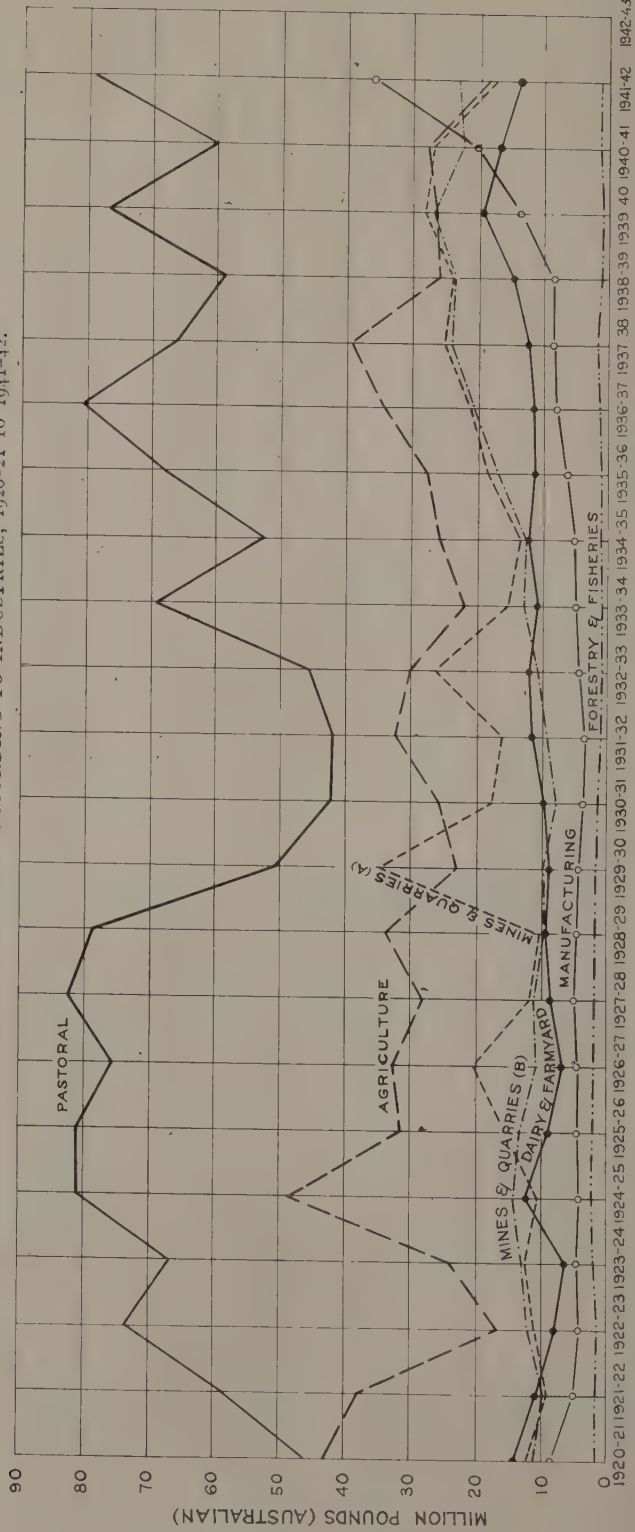




EXPORTS FROM AUSTRALIA, 1910 TO 1940.



EXPORTS OF AUSTRALIAN PRODUCTS ACCORDING TO INDUSTRIES, 1920-21 TO 1941-42.



EXPLANATION.—Mines and Quarries (a) represents the total exports of the produce of this industry, including bullion and specie.  
Mines and Quarries (b) represents the export of products other than gold, to which is added the value of gold produced in the respective years.

- (2) Goods shipped on consignment—the Australian f.o.b. equivalent of the current price offering for similar goods of Australian origin in the principal markets of the country to which the goods were dispatched for sale (as regards wool, the f.o.b. equivalent of current price ruling in Australia will normally provide a sufficient approximation to the f.o.b. equivalent of the price ultimately received).

All values to be shown in terms of Australian currency, and to include cost of containers.

3. **Customs Area.**—The Customs Area, to which all overseas trade statistics issued by this Bureau apply, is the whole area of the Commonwealth of Australia, comprising the States of New South Wales (including Australian Capital Territory), Victoria, Queensland, South Australia, Western Australia and Tasmania, and the Northern Territory. Non-contiguous territories and mandated areas are treated as outside countries, and trade transactions between Australia and these non-contiguous territories are part of the overseas trade of Australia. Such transactions are shown separately, i.e., the trade of Australia with each particular country is separately recorded and tabulated.

4. **Statistical Classification of Imports and Exports.**—Statistics of overseas imports and exports from which the summary tables in this issue of the Official Year Book have been extracted were compiled according to a classification which came into operation on 1st July, 1922. In order to meet the demand for more detailed information relating to imports and exports the number of items has been materially increased. The revised classification was divided into 21 classes, and at 30th June, 1941, comprised approximately 2,000 separate import items and 700 export items.

5. **The Trade Year.**—From 1st July, 1914, the statistics relating to Overseas Trade have been shown according to the fiscal year (July to June). Prior to that date the figures related to the calendar year. A table is given in § 16 showing the total value of imports and exports of merchandise in the calendar years 1939 to 1942 inclusive.

6. **Records of Past Years.**—In the years preceding Federation, each State independently recorded its trade, and in so doing did not distinguish other Australian States from foreign countries. As the aggregation of the records of the several States is necessarily the only available means of ascertaining the trade of Australia for comparison with later years, it is unfortunate that past records of values and the direction of imports and exports were not on uniform lines. The figures in the following table for years prior to Federation have been carefully compiled and may be taken as representative of the overseas trade of Australia as a whole. On the introduction of the Customs Act 1901, the methods of recording values were made uniform throughout the States, but it was not until September, 1903, that a fundamental defect in the system of recording transhipped goods was remedied. Prior to 1905 the value of ships imported or exported was not included in the returns of trade.

7. **Ships' Stores.**—Prior to 1906 goods shipped in Australian ports on board overseas vessels as ships' stores were included in the general exports. From 1906, ships' stores have been specially recorded as such, and omitted from the return of exports. A table showing the value of these stores shipped each year since 1932–33 is given in § 10, page 428.

## § 5. Overseas Trade.

1. **Total Overseas Trade.**—(i) *Including Gold.* The following table shows the total trade (including gold) of Australia with overseas countries from the earliest date for which records are available. To save space, the period 1826 to 1934–35 has been mainly divided into quinquennia, and the figures shown represent the annual averages for the periods specified. The figures for individual years were published in earlier issues of the Official Year Book. (See note to following table.)



## TOTAL OVERSEA TRADE : AUSTRALIA.

(INCLUDING GOLD.)

Period.(a)	Recorded Value.(b)			Value per Inhabitant.						Percentage of Exports on Imports.
	Imports.	Exports.	Total.	Imports.	Exports.	Total.				
	£'000.	£'000.	£'000.	£ s. d.	£ s. d.	£ s. d.	%			
1826 to 30	638	153	791	10 12 5	2 10 11	13 3 4	23.9			
1831 „ 35	1,144	613	1,757	11 19 10	6 8 6	18 8 4	53.6			
1836 „ 40	2,283	1,112	3,395	14 15 9	7 4 1	21 19 10	48.7			
1841 „ 45	1,906	1,378	3,284	9 0 5	6 10 5	15 10 10	72.3			
1846 „ 50	2,379	2,264	4,643	6 18 10	6 12 2	13 11 0	95.2			
1851 „ 55	11,931	11,414	23,345	19 12 5	18 15 4	38 7 9	95.7			
1856 „ 60	18,816	16,019	34,835	18 6 1	15 11 8	33 17 9	85.1			
1861 „ 65	20,132	18,699	38,831	15 17 1	14 14 9	30 11 10	93.0			
1866 „ 70	18,691	19,417	38,108	12 7 4	12 16 11	25 4 3	103.9			
1871 „ 75	21,982	24,247	46,229	12 7 2	13 13 6	26 0 8	110.3			
1876 „ 80	24,622	23,772	48,394	11 19 7	11 10 9	23 10 4	96.6			
1881 „ 85	34,895	28,055	62,950	14 4 3	11 9 5	25 13 8	80.4			
1886 „ 90	34,675	26,579	61,254	11 16 11	9 1 0	20 17 11	76.6			
1891 „ 95	27,335	33,683	61,018	8 5 2	10 2 5	18 7 7	123.2			
1896 „ 1900	33,763	41,094	74,857	9 5 4	11 5 6	20 10 10	121.7			
1901 „ 05	39,258	51,237	90,495	10 1 10	13 2 9	23 4 7	130.5			
1906 „ 10	51,508	(c)69,336	120,844	12 4 8	16 9 11	28 14 7	134.6			
1911 „ 15-16	73,411	74,504	147,915	15 7 4	15 12 10	31 0 2	101.5			
1916-17 to 1920-21	100,735	115,066	215,801	19 7 9	22 2 10	41 10 7	114.2			
1921-22 to 1925-26	136,844	134,545	271,389	23 15 6	23 7 7	47 3 1	98.3			
1926-27 to 1929-30	146,848	137,976	284,824	23 7 0	21 18 10	45 5 10	94.0			
1930-31 to 1934-35(d)	59,704	114,565	..	9 0 10	17 7 1	..	..			
(e)	59,704	92,365	152,069	9 0 10	13 19 10	23 0 8	154.7			
1935-36(d)	85,253	136,964	..	12 12 7	20 5 10	..	..			
(e)	85,253	109,372	194,625	12 12 7	16 4 1	28 16 8	128.3			
1936-37(d)	92,641	162,377	..	13 12 4	23 17 3	..	..			
(e)	92,641	129,664	222,305	13 12 4	19 1 1	32 13 5	140.0			
1937-38(d)	113,975	157,580	..	16 12 1	22 19 2	..	..			
(e)	113,975	125,838	239,813	16 12 1	18 6 8	34 18 9	110.4			
1938-39(d)	102,156	140,496	..	14 15 0	20 5 8	..	..			
(e)	102,156	112,202	214,358	14 15 0	16 3 11	30 18 11	109.8			
1939-40(d)(f)	115,676	148,750	..	16 10 8	21 5 3	..	..			
(e)(f)	115,676	118,762	234,438	16 10 8	16 19 6	33 10 2	102.7			
1940-41(d)(f)	108,650	134,738	..	15 7 5	19 1 3	..	..			
(e)(f)	108,650	107,575	216,225	15 7 5	15 4 5	30 11 10	99.0			
1941-42(d)(f)	149,356g	159,328h	..	20 18 6	22 6 6	..	..			
(e)(f)	149,356g	127,208h	276,564	20 18 6	17 16 6	38 15 0	85.2			

(a) The figures given for the years 1826 to 1934-35 represent the annual averages for the periods shown. The trade of the individual years will be found in Official Year Book No. 34 and earlier issues. From 1914-15 onwards the particulars relate to fiscal years. (b) For actual values for recent years, showing merchandise and bullion and specie separately, see § 0, pars. 5 and 6. (c) Prior to 1906, ships' stores were included in the general exports. For value of goods shipped on oversea vessels each year since 1932-33 see later table, § 10. (d) Recorded values. Imports, British currency; Exports, Australian currency. (e) British currency values. (f) Merchandise only. (g) Complete, includes Governmental imports valued at £872,16,094,000, for which Customs entries were not passed. (h) Complete, includes £A12,645,000 exported on Governmental account for which Customs entries were not passed.

In previous issues of the Official Year Book fluctuations in the value of the oversea trade of Australia have been treated in some detail for earlier years. The enhanced prices ruling for commodities and the peculiar conditions affecting Australian trade were responsible for the high value of imports in the years following the War of 1914-19 and these factors should be taken into consideration in making comparisons with earlier years.

In 1924-25 the total value of oversea trade was £318,454,000 represented by imports £157,143,000, and exports £161,311,000. So far as total trade and exports are concerned these figures are the highest recorded, but the figure for imports was exceeded in 1920-21, and again in 1926-27. Imports in 1924-25, however, included an exceptionally large quantity of bullion and specie valued at £10,543,000. In the three years ended 1928-29 imports fell but exports were well maintained and in 1929-30 both imports and exports declined substantially. The full effects of the economic depression and of certain restrictions imposed by the Government are reflected in the greatly diminished trade figures for 1930-31 onwards. The lowest level was recorded in 1931-32 when the total trade amounted to £130,556,000. Most of the Government restrictions were removed in 1932. Following a gradual improvement in 1933-34 and 1934-35 recovery was more rapid in the three years ended 1937-38 owing generally to higher prices for exports of primary products and the rising flow of imports. In 1937-38, however, export prices fell sharply and declining still further in 1938-39 the value of exports in the latter year declined by nearly £14 million and total trade by more than £25 million. In 1939-40 the value of merchandise trade rose by £38,092,000, exports increasing by £21,730,000 and imports by £16,362,000. In 1940-41 however the merchandise trade declined by over £18 million, imports decreasing by £7 million and exports by £11 million, mainly due to import restrictions and scarcity of shipping. In 1941-42 the merchandise trade increased by over £60 million, imports by £41 million and exports by £19 million largely as the result of the outbreak of war in the Pacific.

(ii) *Excluding Gold.* In recent years there have been large gold movements of an exceptional nature, which have been included in the previous table. The fluctuations in merchandise trade (including silver as merchandise) are shown more clearly in the following table, from which *all* gold movements have been excluded :—

## OVERSEA TRADE : AUSTRALIA.

(EXCLUDING GOLD BULLION, SPECIE AND IN MATTE.)

*British Currency Values.*

Year.	Imports excluding Gold.	Exports excluding Gold.	Total Trade excluding Gold.	Value per Inhabitant.			Percentage of Exports on Imports.
				Imports.	Exports.	Total Trade.	
	£'000. Stg.	£'000. Stg.	£'000. Stg.	£ s. d. Stg.	£ s. d. Stg.	£ s. d. Stg.	£ s. d. Stg.
1937-38	111,782	113,108	224,890	16 5 8	16 9 7	32 15 3	101.2
1938-39	99,384	97,839	197,223	14 6 11	14 2 6	28 9 5	98.4
1939-40 <sup>a</sup>	115,676	118,514	234,190	16 10 8	16 18 10	33 9 6	102.5
1940-41 <sup>a</sup>	108,650	107,478	216,128	15 7 5	15 4 1	30 11 6	98.9
1941-42 <sup>a</sup>	149,356	127,123	276,479	20 18 6	17 16 3	38 14 9	85.1

(a) Merchandise only. See footnote (g) and (h) on previous table.

2. *Balance of Trade.*—The table on page 408 shows the percentage of exports on imports (including gold) for quinquennial periods from 1826 to 1934-35 and for each year from 1935-36 to 1941-42 (owing to censorship provisions the figures since 1939-40 exclude bullion and specie), while the table above shows the percentage of exports on imports (excluding gold) for each year 1937-38 to 1941-42. Reference to the first-mentioned table shows that prior to the quinquennial period 1891-95 the balance of trade, with two exceptions, due to temporary dislocations, had been on the side of

imports, while from that period to 1920-21 the position was reversed. During the subsequent quinquennial period ended 1925-26, there was an excess of imports, as was the case in each of the years 1926-27 to 1929-30. From 1930-31 to 1938-39 exports greatly exceeded imports. In 1939-40 merchandise exports exceeded imports by £3,086,000, but merchandise imports exceeded exports by £1,075,000 in 1940-41 and by £22,148,000 in 1941-42.

In recent years imports and exports of gold for monetary purposes have made the interpretation of the foregoing tables more difficult. In the following table, the balance of commodity trade, including the value of gold currently produced in Australia, has been separated from the monetary movement of gold:—

### COMMODITY BALANCE OF TRADE AND MONETARY MOVEMENT OF GOLD.

*British Currency Values.*

Year.	A. Total Imports other than Gold. (Specie, Bullion and in Matte.)	B. Total Exports, other than Gold. (Specie, Bullion and in Matte.)	C. Gold produced in Australia.	D. Total of Mer- chandise Exports and Gold Production. B+C	E. Commodity Balance of Trade. D-A	F. Net Ex- ports of Gold (Specie, Bullion and in Matte) in excess of Production. F	G. Total Balance. E+F
	£'000,000	£'000,000	£'000,000	£'000,000	£'000,000	£'000,000	£'000,000
1910 ..	59.0	69.8	11.6	81.4	22.4	- 7.9	14.5
1911 ..	65.4	67.5	10.5	78.0	12.6	- 0.1	12.5
1912 ..	76.8	66.8	9.9	76.7	- 0.1	1.1	1.0
1913 ..	78.4	75.1	9.4	84.5	6.1	- 7.3	- 1.2
1914 (a) ..	39.0	36.5	4.4	40.9	1.9	- 3.7	- 1.8
1914-15 ..	64.0	58.0	8.5	66.5	- 2.5	- 6.3	- 3.8
1915-16 ..	77.2	64.2	7.7	71.9	- 5.3	2.3	- 3.0
1916-17 ..	76.0	86.3	6.6	92.9	16.9	4.8	21.7
1917-18 ..	60.8	75.0	5.8	80.8	20.0	- 0.9	19.1
1918-19 ..	95.0	106.8	5.4	112.2	17.2	- 5.6	11.6
1919-20 ..	98.9	144.3	5.4	149.7	50.8	0.1	50.9
1920-21 ..	163.8	126.8	4.7	131.5	-32.3	0.6	-31.7
1921-22 ..	103.0	124.3	3.8	128.1	-25.1	- 0.3	-24.8
1922-23 ..	131.7	115.6	3.3	118.9	-12.8	- 1.1	-13.9
1923-24 ..	140.6	116.7	3.2	119.9	-20.7	- 0.4	-21.1
1924-25 ..	146.7	160.4	2.8	163.2	16.5	-12.3	4.2
1925-26 ..	151.3	141.9	2.3	144.2	- 7.1	1.7	- 5.4
1926-27 ..	164.1	132.7	2.2	134.9	-29.2	8.6	-20.6
1927-28 ..	146.9	138.4	2.1	140.5	- 6.4	- 0.3	- 6.7
1928-29 ..	143.3	138.6	1.9	140.5	- 2.8	0.8	- 2.0
1929-30 ..	130.8	98.1	1.9	100.0	-30.8	24.7	- 6.1
1930-31 ..	60.6	77.2	2.2	79.4	18.8	9.7	28.5
1931-32 ..	44.1	76.3	3.6	79.9	35.8	5.3	41.1
1932-33 ..	56.9	78.8	4.6	83.4	26.5	12.3	38.8
1933-34 ..	59.5	91.1	5.7	96.8	37.3	1.0	38.3
1934-35 ..	72.5	82.6	5.9	88.5	16.0	0.5	16.5
1935-36 ..	83.6	99.1	7.4	106.5	22.9	1.3	24.2
1936-37 ..	90.6	118.3	9.0	127.3	36.7	0.3	37.0
1937-38 ..	111.8	112.7	10.2	122.9	11.1	0.7	11.8
1938-39 ..	99.4	97.5	11.7	109.2	9.8	0.3	10.1
1939-40 ..	115.7	119.2	14.1	133.3	17.6	(b)	(b)
1940-41 ..	108.7	107.7	13.1	120.8	12.1	(b)	(b)
1941-42(c) ..	149.4	127.5	11.8	139.3	-10.1	(b)	(b)

NOTE.—Since 1939-40, the export figures relate only to merchandise actually shipped. Under contracts with the British Government, Australia receives payment for some exportable commodities (e.g., wool) irrespective of when the goods are shipped. Payments for exportable goods will be somewhat larger than the recorded value of exports and payments relating to the balance of trade will be more favorable than is indicated by the figures above for the two years mentioned.

(a) First six months only. (b) Not available for publication. (c) See footnotes (g) and (h) to table on page 408.

3. Balance of Payments.—The balance of visible trade, including the net movement of precious metals, does not present a complete picture of Australia's international transactions during each year. Allowance must also be made for unrecorded imports and exports, for services rendered and received, and for international capital and interest transactions. The values of some of these items are known, and some of those remaining



can be estimated with a sufficient measure of accuracy, but for many items it is difficult to make even a rough guess. A continuous investigation is being made into the values of these "invisible" items in the balance of payments.

### § 6. Direction of Oversea Trade.

1. Imports according to Country of Origin.—The following table shows the value (in British currency) of the imports into Australia during the years 1934-35 to 1938-39 of commodities stated to be the produce or manufacture of the undermentioned countries. The figures, however, do not indicate with any degree of precision the competitive forces of different countries in the Australian import trade. To measure the success or otherwise of these forces requires some analysis which will show the relative amounts of different classes of goods supplied by different countries. The results of such an analysis, confined to the major classes of manufactured goods imported, are shown in § 15 of this Chapter.

Particulars for subsequent years are not available for publication.

#### AUSTRALIAN IMPORTS : COUNTRIES OF ORIGIN. (EXCLUDING GOLD BULLION, SPECIE AND IN MATTE.)

*British Currency Values.*

Country of Origin.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£ Stg.	£ Stg.	£ Stg.	£ Stg.	£ Stg.
United Kingdom .. ..	30,788,269	33,838,843	38,560,293	46,226,985	40,420,289
British Possessions—					
Canada .. ..	4,091,796	5,375,851	6,071,813	8,045,130	7,724,269
Ceylon .. ..	795,307	960,724	1,010,374	890,286	839,717
India .. ..	2,541,377	2,732,145	2,975,892	3,077,616	2,870,297
Malaya (British) .. ..	561,845	488,254	852,282	1,022,899	902,419
New Zealand .. ..	1,294,181	1,552,413	1,322,875	1,708,649	1,770,324
Pacific Islands—					
Nauru .. ..	292,431	361,986	383,641	551,920	650,113
Papua .. ..	116,716	128,078	191,742	165,245	208,377
Territory of New Guinea .. ..	87,523	117,419	195,935	186,884	165,503
Other Islands .. ..	346,240	435,941	598,537	438,989	371,756
Union of South Africa .. ..	177,063	284,846	250,539	290,843	244,308
Other British Possessions .. ..	512,224	720,930	712,069	1,066,616	1,665,309
Total, British Possessions	10,816,703	13,158,587	14,565,699	17,445,077	17,412,392
Total, British Countries	41,604,972	46,997,430	53,125,992	63,672,062	57,832,681
Foreign Countries—					
Belgium .. ..	477,864	568,083	783,393	1,140,974	982,107
China .. ..	364,127	657,178	683,742	601,870	461,559
France .. ..	862,147	790,108	865,919	964,554	1,028,133
Germany .. ..	2,145,315	2,963,049	3,596,584	4,170,624	4,131,212
Italy .. ..	557,438	444,141	410,002	844,983	685,453
Japan .. ..	4,624,740	4,969,571	4,004,465	5,349,087	4,003,191
Netherlands .. ..	504,573	564,236	679,192	656,161	700,709
Netherlands East Indies .. ..	4,390,327	4,928,025	6,176,385	7,530,509	7,119,783
Norway .. ..	382,671	415,252	440,817	495,560	378,808
Pacific Islands .. ..	18,446	33,023	69,937	44,029	46,024
Philippine Islands .. ..	79,385	92,619	110,231	123,466	120,774
Sweden .. ..	828,283	972,096	1,048,655	1,551,333	946,718
Switzerland .. ..	462,023	602,145	600,025	873,629	939,463
United States of America .. ..	11,041,365	13,901,705	12,959,149	17,758,684	14,647,305
Other Foreign Countries .. ..	2,238,227	2,656,012	2,982,232	3,450,412	2,960,101
Total, Foreign Countries	28,977,431	34,557,243	35,410,728	45,555,875	39,241,342
Total .. ..	70,582,403 (a)	81,554,673 (a)	88,536,720 (a)	109,227,937 (a)	97,074,023 (a)

(a) Excludes Outside Packages, 1934-35, £1,857,507; 1935-36, £2,062,275; 1936-37, £2,105,362; 1937-38, £2,554,084; 1938-39, £2,310,204.

2. **Percentage of Imports from Various Countries.**—In view of the fluctuations in the total values of imports, it is somewhat difficult to ascertain from the preceding table the relative importance of the various countries in the import trade of Australia in successive years. A better idea of the proportions of imports supplied by the various countries may be obtained from the following table of percentages.

Particulars for subsequent years are not available for publication.

### AUSTRALIAN IMPORTS : PERCENTAGES FROM COUNTRIES OF ORIGIN.

(EXCLUDING GOLD BULLION, SPECIE AND IN MATTE.)

Country of Origin.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
United Kingdom .. ..	43.62	41.50	43.55	42.32	41.64
British Possessions—					
Canada .. ..	5.80	6.60	6.85	7.37	7.96
Ceylon .. ..	1.13	1.18	1.14	0.81	0.87
India .. ..	3.60	3.35	3.36	2.82	2.96
Malaya (British) .. ..	0.80	0.60	0.96	0.94	0.93
New Zealand .. ..	1.83	1.90	1.50	1.56	1.82
Pacific Islands—					
Nauru .. ..	0.41	0.44	0.43	0.50	0.66
Papua .. ..	0.17	0.16	0.22	0.15	0.22
Territory of New Guinea .. ..	0.12	0.14	0.22	0.17	0.17
Other Islands .. ..	0.49	0.53	0.68	0.40	0.38
Union of South Africa .. ..	0.25	0.35	0.28	0.27	0.25
Other British Possessions .. ..	0.72	0.88	0.81	0.98	1.72
<b>Total, British Possessions ..</b>	<b>15.32</b>	<b>16.13</b>	<b>16.45</b>	<b>15.97</b>	<b>17.94</b>
<b>Total, British Countries ..</b>	<b>58.94</b>	<b>57.63</b>	<b>60.00</b>	<b>58.29</b>	<b>59.58</b>
Foreign Countries—					
Belgium .. ..	0.68	0.70	0.89	1.05	1.01
China .. ..	0.52	0.81	0.77	0.55	0.48
France .. ..	1.22	0.97	0.98	0.88	1.06
Germany .. ..	3.04	3.63	4.06	3.82	4.25
Italy .. ..	0.79	0.54	0.46	0.77	0.71
Japan .. ..	6.55	6.09	4.52	4.90	4.22
Netherlands .. ..	0.72	0.69	0.77	0.60	0.72
Netherlands East Indies .. ..	6.22	6.04	6.98	6.90	7.33
Norway .. ..	0.54	0.51	0.50	0.45	0.39
Pacific Islands .. ..	0.03	0.04	0.08	0.04	0.05
Philippine Islands .. ..	0.11	0.12	0.12	0.11	0.12
Sweden .. ..	1.17	1.19	1.18	1.42	0.97
Switzerland .. ..	0.66	0.74	0.68	0.80	0.97
United States of America .. ..	15.64	17.05	14.64	16.26	15.09
Other Foreign Countries .. ..	3.17	3.25	3.37	3.16	3.05
<b>Total, Foreign Countries ..</b>	<b>41.06</b>	<b>42.37</b>	<b>40.00</b>	<b>41.71</b>	<b>40.42</b>
<b>Total .. ..</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The relative positions of the various countries supplying goods to Australia have not varied much during the period covered by the table. The proportion from the United Kingdom has declined as has that from India, while Canada has consistently increased its percentage. Of the foreign countries Netherlands East Indies, Germany and Belgium increased their proportions, while that from Japan declined each year except 1937-38. The percentage of imports from the United States of America fluctuated without showing any particular trend.

3. Direction of Exports.—The following table shows the value in Australian currency of commodity exports to the principal countries during the five years 1934-35 to 1938-39 inclusive.

Particulars for subsequent years are not available for publication.

### EXPORTS FROM AUSTRALIA TO VARIOUS COUNTRIES.

(EXCLUDING GOLD BULLION, SPECIE AND IN MATTE.)

*Australian Currency Values.*

Country of Destination.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£ A.	£ A.	£ A.	£ A.	£ A.
United Kingdom .. ..	54,163,538	61,644,049	73,492,399	78,659,611	66,724,867
British Possessions—					
Canada .. ..	1,578,259	1,348,104	2,385,620	2,250,023	1,993,522
Ceylon .. ..	648,187	970,961	928,151	871,221	1,326,568
Fiji .. ..	361,132	483,998	592,325	713,192	622,916
Hong Kong .. ..	715,994	624,663	803,010	1,048,833	475,263
India .. ..	785,815	973,171	1,086,754	1,104,692	1,965,229
Malaya (British) .. ..	1,315,822	1,263,526	1,727,956	2,063,740	1,911,207
Mauritius .. ..	98,790	96,000	115,976	138,013	108,703
New Zealand .. ..	3,617,339	4,396,840	5,686,229	7,110,430	6,681,975
Papua .. ..	151,865	165,613	232,027	319,228	299,376
Union of South Africa .. ..	316,381	449,056	406,091	713,326	813,326
Other British Possessions .. ..	1,592,071	2,562,225	3,310,793	2,311,422	2,191,450
Total, British Possessions .. ..	11,181,655	13,334,157	17,274,932	18,644,120	18,389,595
Total, British Countries .. ..	65,345,193	74,978,206	90,767,331	97,303,731	85,114,402
Foreign Countries—					
Belgium .. ..	6,080,381	7,260,967	9,423,821	5,685,579	5,546,514
Chile and Peru .. ..	2,029	2,931	3,438	60,988	2,542
China .. ..	2,472,262	1,212,821	842,963	616,520	3,022,571
Manchuria, including Kwantung Peninsula .. ..	1,613,775	839,815	142,427	190,747	63,450
Egypt .. ..	639,654	524,066	562,135	640,727	601,019
France .. ..	4,731,952	6,131,143	7,907,054	10,322,346	9,378,782
Germany .. ..	1,738,481	2,368,453	4,239,026	4,410,098	2,652,420
Italy .. ..	995,827	689,225	5,331,528	2,644,058	1,211,326
Japan .. ..	12,095,514	17,661,232	9,705,738	5,900,098	4,865,469
Netherlands .. ..	927,723	1,200,638	1,983,223	779,515	1,038,627
Netherlands East Indies .. ..	1,182,329	1,274,195	1,395,183	1,459,922	1,373,197
Norway .. ..	7,439	10,052	62,735	56,573	25,263
Pacific Islands (Foreign) .. ..	346,377	374,878	442,348	461,181	385,800
Philippine Islands .. ..	324,053	553,311	666,733	619,504	498,893
Spain .. ..	559,912	182,952	175,801	133,448	954
Sweden .. ..	240,751	264,918	344,687	472,657	637,038
United States of America .. ..	2,754,228	5,615,372	10,935,103	3,386,567	3,614,038
U.S.S.R. (Russia) .. ..	84,180	10,700	20,721	1,121,262	278,460
Other Foreign Countries .. ..	1,564,676	3,280,145	3,537,599	5,402,256	2,232,255
Total, Foreign Countries .. ..	38,361,543	49,457,814	57,722,263	44,364,046	37,428,618
Total .. ..	103,706,736	124,436,020	148,489,594	141,667,777	122,543,020



4. **Percentage of Exports to Various Countries.**—In consequence of the fluctuations in the total values of exports, the relative importance of various countries as markets for Australian produce is shown more clearly by the following table of percentages.

Particulars for subsequent years are not available for publication.

### EXPORTS FROM AUSTRALIA : PERCENTAGES TO VARIOUS COUNTRIES.

(EXCLUDING GOLD BULLION, SPECIE AND IN MATTE.)

Country of Destination.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
United Kingdom .. ..	52.23	49.54	49.50	55.52	54.45
British Possessions—					
Canada .. ..	1.52	1.08	1.61	1.59	1.63
Ceylon .. ..	0.63	0.78	0.62	0.61	1.08
Fiji .. ..	0.35	0.39	0.40	0.50	0.51
Hong Kong .. ..	0.69	0.50	0.54	0.74	0.39
India .. ..	0.76	0.78	0.73	0.78	1.60
Malaya (British) .. ..	1.27	1.02	1.16	1.46	1.56
Mauritius .. ..	0.10	0.07	0.08	0.10	0.09
New Zealand .. ..	3.49	3.53	3.83	5.02	5.45
Papua .. ..	0.14	0.14	0.16	0.23	0.25
Union of South Africa .. ..	0.30	0.36	0.27	0.50	0.66
Other British Possessions .. ..	1.53	2.06	2.23	1.63	1.79
<b>Total, British Possessions ..</b>	<b>10.78</b>	<b>10.71</b>	<b>11.63</b>	<b>13.16</b>	<b>15.01</b>
<b>Total, British Countries ..</b>	<b>63.01</b>	<b>60.25</b>	<b>61.13</b>	<b>68.68</b>	<b>69.46</b>
Foreign Countries—					
Belgium .. ..	5.86	5.84	6.35	4.01	4.53
Chile and Peru .. ..	0.00	0.00	0.00	0.04	0.00
China .. ..	2.38	0.98	0.57	0.44	2.46
Manchuria, including Kwantung Peninsula .. ..	1.56	0.67	0.10	0.14	0.05
Egypt .. ..	0.62	0.42	0.38	0.45	0.49
France .. ..	4.56	4.93	5.32	7.29	7.65
Germany .. ..	1.68	1.90	2.85	3.11	2.17
Italy .. ..	0.96	0.56	3.59	1.87	0.99
Japan .. ..	11.66	14.19	6.54	4.16	3.97
Netherlands .. ..	0.90	0.96	1.34	0.55	0.85
Netherlands East Indies .. ..	1.14	1.02	0.94	1.03	1.12
Norway .. ..	0.01	0.01	0.04	0.04	0.02
Pacific Islands (Foreign) .. ..	0.33	0.30	0.30	0.33	0.31
Philippine Islands .. ..	0.31	0.45	0.45	0.44	0.41
Spain .. ..	0.54	0.15	0.12	0.09	0.00
Sweden .. ..	0.23	0.21	0.23	0.33	0.52
United States of America .. ..	2.66	4.51	7.36	2.39	2.95
U.S.S.R. (Russia) .. ..	0.08	0.01	0.01	0.79	0.23
Other Foreign Countries .. ..	1.51	2.64	2.38	3.82	1.82
<b>Total, Foreign Countries ..</b>	<b>36.99</b>	<b>39.75</b>	<b>38.87</b>	<b>31.32</b>	<b>30.54</b>
<b>Total .. ..</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

5. **Balance of Trade with Principal Countries.**—In the following table a comparison is made in British currency values of the total Australian trade in merchandise (excluding bullion and specie) with principal countries during the years 1937-38 and 1938-39.

Particulars for subsequent years are not available for publication.

### BALANCE OF AUSTRALIAN TRADE WITH PRINCIPAL COUNTRIES.

(EXCLUDING BULLION AND SPECIE.)

*British Currency Values.*

Country.	Imports from— (a)		Exports to—		Excess of Exports.	
	1937-38.	1938-39.	1937-38.	1938-39.	1937-38.	1938-39.
	£Stg.'000.	£Stg.'000.	£Stg.'000.	£Stg.'000.	£Stg.'000.	£Stg.'000.
United Kingdom .. ..	46,226	40,420	58,309	53,252	12,083	12,832
Canada .. ..	8,045	7,724	1,796	1,592	— 6,249	— 6,132
India .. ..	3,078	2,870	745	1,550	— 2,333	— 1,320
New Zealand .. ..	1,707	1,769	5,671	5,330	3,964	3,561
Other British Countries ..	4,567	4,979	6,215	5,440	1,648	461
<b>Total, British Countries ..</b>	<b>63,623</b>	<b>57,762</b>	<b>72,736</b>	<b>67,164</b>	<b>9,113</b>	<b>9,402</b>
Belgium .. ..	1,141	982	4,560	4,428	3,419	3,446
China .. ..	602	462	492	2,413	— 110	1,931
France .. ..	965	1,028	7,725	7,488	6,760	6,460
Germany .. ..	4,171	4,131	3,500	2,112	— 671	— 2,019
Italy .. ..	845	685	1,502	967	657	282
Japan .. ..	5,349	4,093	4,711	3,885	— 638	— 208
Netherlands East Indies ..	7,531	7,120	1,169	1,096	— 6,362	— 6,024
United States of America ..	17,759	14,647	2,695	2,877	— 15,064	— 11,770
Other Foreign Countries ..	7,193	6,093	13,192	4,603	5,999	— 1,490
<b>Total, Foreign Countries ..</b>	<b>45,556</b>	<b>39,241</b>	<b>39,546</b>	<b>29,869</b>	<b>— 6,010</b>	<b>— 9,372</b>

(a) Excludes outside packages.

The balance of trade with single countries is of little significance, since in the first place, there is still a fair proportion of Australian produce distributed through the United Kingdom either immediately, by transshipment or re-sale, or ultimately, by incorporation in manufactures. Further, in very many cases international balances are equated directly by services or indirectly by exchange of goods between several countries.

6. **Principal Imports and Exports, Countries.**—The total value of imports from and exports to each of the more important British and foreign countries during 1938-39, together with brief particulars of the principal commodities interchanged with such countries will be found in the Official Year Book, No. 33, pp. 776-781.

## § 7. Classified Summary of Australian Oversea Trade with The United Kingdom.

1. Imports.—The following table shows the value of imports into Australia of United Kingdom origin during each of the last five years, arranged in accordance with the statistical classification which came into operation on 1st July, 1922 :—

### IMPORTS INTO AUSTRALIA OF UNITED KINGDOM ORIGIN: CLASSES.

#### British Currency Values.

Classes.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£ Stg.	£ Stg.	£ Stg.	£ Stg.	£ Stg.
I. Animal foodstuffs, etc. ..	286,568	300,283	199,623	57,598	12,073
II. Vegetable foodstuffs; non-alcoholic beverages, etc. ..	153,452	187,949	170,620	115,818	38,169
III. Alcoholic liquors, etc. ..	625,055	613,874	914,706	574,803	333,252
IV. Tobacco, etc. ..	20,445	19,231	21,906	11,667	25,072
V. Live animals ..	80,657	47,914	28,233	10,355	4,460
VI. Animal substances, etc. ..	27,882	36,266	33,059	25,340	20,462
VII. Vegetable substances, etc. ..	237,162	211,174	298,345	265,855	276,100
VIII. Apparel, textiles, etc. ..	12,288,251	10,933,422	13,300,109	15,458,140	18,646,582
IX. Oils, fats and waxes ..	127,530	131,837	(a)	(a)	(a)
X. Paints and varnishes ..	372,298	383,043	411,711	467,650	456,442
XI. Stones and minerals, etc. ..	226,023	278,568	246,235	208,514	276,071
XII. Metals, metal manufactures, and machinery ..	21,174,615	18,246,658	18,167,415	21,503,259	23,439,897
XIII. Rubber and leather, etc. ..	253,378	247,671	275,551	201,477	385,072
XIV. Wood and wicker, etc. ..	80,080	85,129	60,100	62,103	58,576
XV. Earthenware, etc. ..	998,637	946,220	1,148,066	1,452,534	1,788,158
XVI. Paper and stationery ..	3,367,801	2,945,640	3,181,266	3,265,814	2,430,143
XVII. Jewellery, etc. ..	275,796	275,301	313,450	374,603	494,214
XVIII. Optical, surgical, and scientific instruments ..	509,818	523,381	629,607	810,757	885,745
XIX. Drugs, chemicals, etc. ..	2,056,472	2,288,387	2,551,449	2,491,715	2,850,552
XX. Miscellaneous ..	3,057,652	2,614,335	1,972,794	1,970,819	4,047,219
XXI. Gold and silver; and bronze specie ..	2,502	14,307	(b)	(b)	(b)
Total ..	46,228,674	40,433,500	£43,933,245	£49,388,881	£56,468,907

(a) Total for Class IX. is included with Class XX.

(b) Not available for publication.

(c) Merchandise only.

2. Exports.—In the following table the exports from Australia to the United Kingdom are shown in classes according to the same classification as for imports.

### EXPORTS FROM AUSTRALIA TO THE UNITED KINGDOM: CLASSES.

#### Australian Currency Values.

Classes.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£ A.	£ A.	£ A.	£ A.	£ A.
I. Animal foodstuffs, etc. ..	22,709,012	24,483,853	30,163,321	25,098,413	17,042,066
II. Vegetable foodstuffs; non-alcoholic beverages, etc. ..	24,344,460	14,369,098	14,205,198	10,331,017	4,813,498
III. Alcoholic liquors, etc. ..	863,064	906,358	843,523	167,370	64,151
IV. Tobacco, etc. ..	518	1,196	600	635	252
V. Live animals ..	2,217	1,754	500	..	..
VI. Animal substances, etc. ..	22,026,809	19,475,233	39,779,664	14,553,042	15,760,733
VII. Vegetable substances, etc. ..	127,576	109,770	145,557	138,410	128,880
VIII. Apparel, textiles, etc. ..	49,522	40,909	35,225	13,305	1,990
IX. Oils, fats and waxes ..	229,858	179,108	314,392	435,719	231,127
X. Paints and varnishes ..	17,913	3,412	1,087	613	..
XI. Stones and minerals, etc. ..	1,398,300	846,994	594,467	593,424	440,956
XII. Metals, metal manufactures, and machinery ..	5,400,389	5,291,304	7,401,169	4,504,659	3,829,280
XIII. Rubber and leather, etc. ..	443,601	422,548	1,002,195	370,335	369,834
XIV. Wood and wicker, etc. ..	293,938	206,537	258,751	258,122	26,769
XV. Earthenware, etc. ..	3,189	3,679	297	1	402
XVI. Paper and stationery ..	44,187	32,464	18,513	4,669	3,500
XVII. Jewellery, etc. ..	45,101	31,626	15,410	3,728	28,925
XVIII. Optical, surgical, and scientific instruments ..	12,822	16,096	7,135	5,386	450
XIX. Drugs, chemicals, etc. ..	137,363	108,562	177,435	149,234	143,261
XX. Miscellaneous ..	133,147	166,862	340,683	651,097	365,232
XXI. Gold and silver; and bronze specie ..	8,076,814	2,018,368	(b)	(b)	(b)
Total (a) ..	86,359,800	68,716,031	95,395,122	57,282,179	43,251,306
			(c)		(c)

(a) Estimated British currency value, 1937-38, £ Stg. 68,962,236; 1938-39, £ Stg. 54,866,278; 1939-40, £ Stg. 76,163,770; 1940-41, £ Stg. 45,734,274; 1941-42, £ Stg. 34,531,981. (b) Not available for publication. (c) Merchandise only.



3. Imports of Principal Articles.—The following table shows the quantity, where available, and the value of the principal articles imported into Australia from the United Kingdom during the last five years. The articles are shown in the order in which they appear in the detailed classification.

## PRINCIPAL COMMODITIES IMPORTED OF UNITED KINGDOM ORIGIN: AUSTRALIA.

British Currency Values.

Article.		1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Whisky .. ..	{ gal.	532,547	521,931	774,581	452,727	200,465
Fibres .. ..	£	565,984	552,521	848,286	521,068	295,818
Hides and skins .. ..	£	43,089	38,569	48,205	47,372	62,073
Seeds .. ..	£	6,999	21,214	7,864	2,403	4,392
Socks and stockings .. ..	£	15,593	22,949	14,787	23,372	1,622
Gloves .. ..	£	37,364	34,724	28,579	16,113	34,918
Hats and caps .. ..	£	54,615	42,551	56,043	160,438	469,271
Trimmings and ornaments .. ..	£	79,361	74,057	71,515	43,809	59,118
Other apparel and attire .. ..	£	105,828	101,668	122,274	168,731	257,179
Carpets and carpeting .. ..	£	463,660	446,100	379,618	460,702	457,496
Floorcloths and linoleums .. ..	£	1,137,878	934,428	1,249,810	963,833	900,770
Piece Goods—	£	505,394	472,638	531,268	491,870	588,398
Canvas and duck .. ..	£					
Cotton and linen .. ..	£	567,485	418,387	497,777	514,111	530,942
Silk and artificial silk .. ..	£	4,390,844	3,661,106	5,039,781	5,821,388	5,067,802
Woolen or containing wool .. ..	£	1,188,007	849,312	1,482,000	1,759,704	3,797,959
All other piece goods .. ..	£	251,324	220,904	198,757	206,348	774,182
Sewing silks, cottons, etc. .. ..	£	933,347	706,862	1,049,054	1,380,587	1,150,863
Bags and sacks .. ..	£	458,152	469,556	494,663	731,183	684,632
Yarns—	£	3,764	5,251	7,532	11,933	6,270
Artificial silk .. ..	£					
Cotton .. ..	£	448,374	203,337	579,682	1,026,082	1,335,698
Woolen .. ..	£	566,288	366,072	488,274	659,825	557,304
Other .. ..	£	57,650	47,044	43,246	33,743	51,087
Electrical machinery and appliances .. ..	£	26,230	42,628	38,041	34,022	42,075
Electrical cable and wire, covered .. ..	{ cwt.	2,417,874	2,630,965	1,990,913	1,772,391	1,815,806
Agricultural machinery .. ..	£	238,182	233,723	(b)	(b)	(b)
Metal-working machinery .. ..	£	1,276,550	1,113,605	1,318,457	1,065,637	838,056
Motive-power machinery .. ..	£	70,422	39,950	24,817	23,159	18,001
Iron and Steel—	£	550,142	754,904	(b)	(b)	(b)
Pipes and tubes .. ..	£	1,021,095	899,085	924,083	822,065	1,374,406
Plate and sheet .. ..	£					
Cutlery and platedware .. ..	£	569,068	415,349	(b)	(b)	(b)
Tools of trade .. ..	£	3,580,174	2,127,177	(b)	(b)	(b)
Motor cars, chassis, bodies, and parts .. ..	£	491,047	455,311	491,667	608,595	613,462
Rubber and rubber manufactures .. ..	£	525,010	390,664	417,144	484,291	487,438
Crocery .. ..	£					
Glass and glassware .. ..	£	3,036,579	2,795,593	2,369,501	690,256	190,411
Paper, printing .. ..	£	187,016	175,707	212,734	184,048	272,015
Stationery and paper manufactures .. ..	£	421,229	403,010	464,590	556,003	738,380
Drugs, chemicals, and fertilizers .. ..	£	318,587	290,661	340,170	565,740	659,806
Arms and explosives .. ..	£	1,017,189	824,191	759,679	542,608	179,941
Musical instruments, pianos, etc. .. ..	£					
All other articles .. ..	£	1,430,958	1,413,252	1,392,260	1,165,916	1,265,856
Cinematograph films .. ..	{ lin. ft.	4,533,827	3,781,934	2,791,471	3,475,467	3,952,697
Drugs, chemicals, and fertilizers .. ..	£	65,940	56,940	40,483	41,986	44,105
Arms and explosives .. ..	£	2,056,472	2,288,387	2,551,449	2,401,715	2,850,552
Musical instruments, pianos, etc. .. ..	£	448,068	953,406	(b)	(b)	(b)
All other articles .. ..	£	73,871	57,198	64,671	44,439	51,834
Total Imports .. ..	£	14,755,144	12,526,048	(b)	(b)	(b)
				(c)	(c)	(c)

(a) Excludes undressed timber not measured in super. ft.  
 (c) Merchandise only.

(b) Not available for publication.

4. Exports of Principal Articles of Australian Produce.—(i) Quantities. The following table shows the quantities of the principal articles of Australian produce exported to the United Kingdom during the period 1937-38 to 1941-42. The articles are shown in the order in which they appear in the detailed classification.

# PRINCIPAL COMMODITIES EXPORTED TO THE UNITED KINGDOM : QUANTITIES, AUSTRALIA.

Article.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Butter .. .. . centl.	1,841,698	2,170,515	2,441,918	1,740,092	1,049,717
Cheese .. .. . "	261,460	347,991	406,823	226,321	154,498
Eggs in shell .. .. doz.	11,215,950	10,069,570	10,192,470	17,224,870	6,158,850
Beef .. .. . centl.	2,722,367	2,477,128	2,471,197	1,429,819	759,797
Lamb .. .. . "	1,569,262	1,557,485	1,984,365	2,169,101	1,612,612
Mutton .. .. . "	397,959	253,074	433,286	147,634	53,361
Pork .. .. . "	333,008	301,204	509,545	727,050	317,170
Meats, preserved in tins .. .. "	92,823	116,553	176,234	147,046	242,269
Milk and cream .. .. . "	21,740	28,806	31,222	49,032	23,965
Fruits, dried .. .. . "	1,028,836	1,173,664	651,250	934,747	849,543
" fresh .. .. . "	1,899,370	2,023,970	837,632	32,190	..
Barley .. .. . "	1,984,998	1,027,052	259,425	95,903	..
Wheat .. .. . "	36,913,371	19,340,770	17,447,312	14,462,218	4,139,927
Flour .. .. . "	3,758,858	2,379,151	3,788,735	1,608,356	209,601
Sugar (cane) .. .. . cwt.	7,163,600	7,829,940	7,171,800	3,697,700	1,528,320
Wine .. .. . gal.	3,710,970	3,507,410	3,369,144	670,364	212,585
Wool (in terms of greasy wool) .. centl.	3,614,628	4,125,467	5,397,298	1,463,313	1,987,649
Pearl-shell .. .. . cwt.	24,455	20,877	4,667	340	240
Tallow (unrefined) .. .. . "	178,602	167,695	166,565	299,130	198,730
Timber, undressed, including					
Logs (a) .. .. . sup. ft.	18,633,147	13,188,491	14,634,068	10,766,731	1,605,288
Soap .. .. . centl.	12,084	9,746	13,774	5,478	..

(a) Excludes undressed timber not measured in super. ft.

(ii) *Values.* The values of the principal articles of Australian produce exported to the United Kingdom during the period 1937-38 to 1941-42 are given in the table hereunder:—

# PRINCIPAL COMMODITIES EXPORTED TO THE UNITED KINGDOM : VALUES, AUSTRALIA.

## *Australian Currency Values.*

Article.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£A.	£A.	£A.	£A.	£A.
Butter .. .. . "	9,970,954	12,127,260	14,715,766	10,516,649	6,379,686
Cheese .. .. . "	792,905	1,019,681	1,324,676	982,581	525,324
Eggs in shell .. .. . "	680,654	631,976	591,220	1,082,838	391,294
Meats .. .. . "	11,163,378	10,581,318	13,304,464	12,252,923	8,626,119
Milk and cream .. .. . "	67,850	88,176	84,703	109,384	85,616
Fruits, dried .. .. . "	1,978,228	2,045,646	1,181,594	1,597,751	1,480,921
" fresh .. .. . "	1,436,584	1,400,613	769,008	33,103	..
" preserved in liquid .. .. . "	1,064,795	1,041,385	1,113,425	38,930	..
Barley .. .. . "	657,006	278,026	65,548	21,786	..
Wheat .. .. . "	13,600,504	4,443,613	4,467,481	4,531,309	1,398,607
Flour .. .. . "	1,742,708	705,518	1,539,547	697,747	82,556
Sugar (cane) .. .. . "	3,325,643	3,685,761	4,231,319	2,372,277	992,134
Wine .. .. . "	862,164	896,659	836,161	163,246	63,172
Hides and skins .. .. . "	1,570,879	813,201	975,796	998,236	339,706
Wool .. .. . "	20,247,336	18,513,175	38,703,482	13,527,483	15,399,458
Pearl-shell .. .. . "	146,657	90,777	12,068	1,775	2,220
Tallow (unrefined) .. .. . "	192,338	137,404	165,507	294,321	184,162
Leather .. .. . "	441,785	320,322	994,809	358,341	368,372
Timber, undressed, including logs (a)	232,284	152,304	160,866	110,100	19,521
Soap .. .. . "	26,893	21,489	30,192	12,054	..
Gold .. .. . "	7,624,457	1,990,948	(c)	(c)	(c)
Silver .. .. . "	370,157	21,794	(c)	(c)	(c)
All other articles .. .. . "	7,808,638	7,386,780	9,949,730	7,473,340	6,855,377
Total Exports (Australian Produce) (b) .. .. . "	86,005,697	68,393,916	95,217,369 (d)	57,176,174 (d)	43,194,245 (d)

(a) Excludes undressed timber not measured in super. ft. (b) Estimated British currency value—1937-38, £ Stg. 68,679,398; 1938-39, £ Stg. 54,609,099; 1939-40, £ Stg. 76,021,851; 1940-41, £ Stg. 45,649,640; 1941-42, £ Stg. 34,486,423. (c) Not available for publication. (d) Merchandise only.

## § 8. Trade with Eastern Countries.

1. Principal Articles Exported.—The following table shows the value of exports of Australian and other produce from Australia to Eastern countries during the years 1934-35 to 1938-39. The countries concerned in this trade are Borneo (British), Burma, Ceylon, China, French Indo-China, Hong Kong, India, Japan, Korea, Kwantung Peninsula, Malaya (British), Manchuria, Netherlands East Indies, Philippine Islands, Siam, Timor (Portuguese), and French and Portuguese Possessions in India. After declining sharply in 1933-34 the export trade with Eastern countries rose substantially in the next two years with increased shipments of wool, wheat, flour and minerals; the exports in 1935-36 were valued at £25,532,518, which was the highest figure recorded since 1928-29. In 1936-37 the value of exports to Eastern countries decreased by more than £8 million largely as the result of the heavy reduction in the purchases of wool by Japan; wheat shipments to Japan and China also declined in value by nearly £2 million during the year. The value of exports decreased still further in 1937-38 and again a decline in the purchase of wool by Japan coupled with the recession in wool values was the principal contributing factor. Mainly owing to heavier shipments of wheat the exports increased by more than £1 million in 1938-39.

Particulars for subsequent years are not available for publication.

## TOTAL EXPORTS FROM AUSTRALIA TO EASTERN COUNTRIES.

*Australian Currency Values.*

Article.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£ A.	£ A.	£ A.	£ A.	£ A.
Biscuits .. .. .	39,767	35,682	41,114	34,001	37,353
Butter .. .. .	544,215	657,264	640,544	622,195	588,393
Cheese .. .. .	22,012	25,538	39,647	39,014	43,555
Coal .. .. .	74,978	81,907	94,821	149,964	125,740
Fruits—					
Fresh .. .. .	122,628	124,550	155,093	170,947	166,076
Dried and preserved .. .. .	42,081	40,073	45,116	46,421	42,981
Grain and pulse—					
Wheat .. .. .	4,395,925	2,919,229	1,105,648	935,842	2,402,855
Flour .. .. .	3,304,000	2,789,659	2,582,600	3,090,681	3,036,957
Other (prepared and unprepared) .. .. .	60,306	71,798	129,050	101,585	70,288
Hay, chaff, and compressed fodder .. .. .	16,014	16,187	25,111	13,553	16,156
Horses .. .. .	102,586	105,995	126,518	97,525	85,895
Infants' and invalids' food .. .. .	216,571	211,287	145,306	171,427	193,909
Iron ore .. .. .	140,535	158,064	103,974	48,614	51,477
Iron and steel (scrap) .. .. .	137,934	115,665	217,112	214,463	283,302
Jams and jellies .. .. .	42,328	42,688	49,178	46,143	44,651
Lard and refined animal fats .. .. .	28,432	35,046	40,738	34,432	26,248
Lead, pig .. .. .	51,084	38,614	138,237	80,206	13,350
Leather .. .. .	141,907	107,944	173,761	181,723	134,319
Meats—					
Bacon and hams .. .. .	84,420	91,423	92,952	95,437	94,640
Other meats .. .. .	214,182	244,439	253,450	322,298	274,015
Milk and cream .. .. .	456,108	455,420	611,021	662,234	436,472
Pearl-shell and trochus-shell .. .. .	46,737	53,066	59,696	37,878	42,425
Sandalwood .. .. .	108,600	66,845	106,448	36,676	42,330
Skins, hoofs, horns, bones, and sinews .. .. .	135,836	162,214	185,803	339,223	176,055
Tallow (unrefined) .. .. .	266,937	237,484	174,981	218,591	156,105
Timber (undressed) .. .. .	180,984	85,191	148,753	143,690	62,893
Wool .. .. .	8,785,163	14,767,219	7,860,278	4,367,877	4,180,914
Zinc—					
Bars, blocks, ingots, etc. .. .. .	303,282	528,032	937,474	390,939	597,366
Concentrates .. .. .	.. .. .	.. .. .	.. .. .	.. .. .	14,895
Other merchandise .. .. .	695,050	614,038	654,608	898,231	1,393,170
Total merchandise .. .. .	20,790,602	24,882,561	16,939,932	13,591,810	14,834,785
Specie, and gold and silver bullion .. .. .	475,864	649,957	546,473	610,518	933,965
Total Exports .. .. .	221,266,466	225,532,518	217,485,505	214,202,328	215,768,750

(a) Estimated British currency value—1934-35, £ Stg. 16,979,978; 1935-36, £ Stg. 20,386,200; 1936-37, £ Stg. 13,960,483; 1937-38, £ Stg. 11,339,184; 1938-39, £ Stg. 12,571,315.



2. Destination of Exports of Merchandise.—The next table shows the destination of merchandise exported to Eastern countries during the five years ended 1938-39:—

Particulars for subsequent years are not available for publication.

### EXPORTS OF MERCHANDISE FROM AUSTRALIA TO EASTERN COUNTRIES.

*Australian Currency Values.*

Country of Destination.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£ A.	£ A.	£ A.	£ A.	£ A.
China .. .. .	2,472,262	1,212,821	842,963	616,520	3,022,571
Hong Kong .. .. .	715,094	624,663	803,010	1,048,833	475,263
India, Burma and Ceylon .. .. .	961,832	1,301,206	1,468,432	1,467,340	2,423,663
Japan .. .. .	12,095,514	17,661,232	9,705,738	5,900,098	4,865,469
Malaya (British) .. .. .	1,315,822	1,263,526	1,727,956	2,063,740	1,911,007
Manchuria, including Kwantung Peninsula .. .. .	1,613,775	839,815	142,427	190,747	63,450
Netherlands East Indies .. .. .	1,182,329	1,274,195	1,395,183	1,404,379	1,373,197
Philippine Islands .. .. .	324,053	553,311	666,733	619,504	498,893
Thailand (Siam) .. .. .	58,660	100,959	118,291	117,382	119,494
Other Eastern Countries .. .. .	50,361	50,833	68,299	103,267	81,778
Total .. .. .	220,790,602	224,882,561	216,939,032	213,591,810	214,834,785

(a) Estimated British currency value, 1934-35, £ Stg. 16,639,285; 1935-36, £ Stg. 19,866,316; 1936-37, £ Stg. 13,524,177; 1937-38, £ Stg. 10,851,748; 1938-39, £ Stg. 11,844,143.

3. Imports of Merchandise from Eastern Countries.—The values of imports into Australia from Eastern countries during the years 1934-35 to 1938-39 are shown in the following table. The principal commodities imported in 1938-39, according to the countries of origin, were:—Ceylon—Tea, £703,610; India—Bags, Sacks and Hessians, £1,876,322; Japan—Silk Piece goods, £1,160,761; Cotton and Linen Piece goods, £726,050; Netherlands East Indies—Tea, £1,622,624; Petroleum Spirit, £3,431,054; Petroleum, crude, £198,453; Kerosene, £431,823; Residual Oil, £636,288.

Particulars for subsequent years are not available for publication.

### IMPORTS OF MERCHANDISE INTO AUSTRALIA FROM EASTERN COUNTRIES.

*British Currency Values.*

Country of Origin.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£ Stg.	£ Stg.	£ Stg.	£ Stg.	£ Stg.
China .. .. .	364,127	657,178	683,742	601,870	461,559
Hong Kong .. .. .	22,677	26,713	40,143	37,022	35,567
India, Burma and Ceylon .. .. .	3,336,684	3,692,869	3,086,266	3,988,581	3,736,288
Japan .. .. .	4,624,740	4,969,571	4,004,465	5,349,086	4,093,191
Malaya (British) .. .. .	561,845	488,254	852,282	1,022,899	902,419
Manchuria, including Kwantung Peninsula .. .. .	3,906	8,156	20,853	16,106	14,887
Netherlands East Indies .. .. .	4,390,327	4,928,025	6,176,385	7,530,509	7,119,785
Philippine Islands .. .. .	79,885	92,619	110,231	123,466	120,774
Thailand (Siam) .. .. .	1,879	6,403	2,609	6,870	3,010
Other Eastern Countries .. .. .	74,423	83,993	42,039	143,047	190,109
Total .. .. .	13,460,493	14,953,781	15,919,015	18,819,456	16,677,589

By comparison with footnote (a) of the previous table, the balance of trade with Eastern countries can be ascertained and shows an excess of exports from Australia during the first two years and an excess of imports for the remaining years.

### § 9. Classified Summary of Australian Oversea Trade.

1. Imports.—The following table shows the value of imports into Australia during each of the last five years, arranged in accordance with the statistical classification which came into operation on 1st July, 1922:—

#### IMPORTS INTO AUSTRALIA: CLASSES.

*British Currency Values.*

Classes.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£ Stg.	£ Stg.	£ Stg.	£ Stg.	£ Stg.
I. Animal foodstuffs, etc. ..	1,565,765	1,599,827	1,572,288	1,070,792	804,512
II. Vegetable foodstuffs; non-alcoholic beverages, etc. ..	3,768,619	3,957,780	4,584,361	4,611,796	5,377,590
III. Alcoholic liquors, etc. ..	727,220	719,967	1,016,624	601,908	345,403
IV. Tobacco, etc. ..	2,011,004	1,863,887	1,926,516	495,351	827,658
V. Live animals ..	193,500	182,809	132,137	44,616	32,011
VI. Animal substances, etc. ..	2,260,898	1,942,284	1,787,711	1,335,941	764,212
VII. Vegetable substances, etc. ..	3,194,512	2,596,939	3,685,891	4,092,327	5,208,743
VIII. Apparel, textiles, etc. ..	21,016,945	17,756,098	24,586,791	24,217,002	28,711,895
IX. Oils, fats and waxes ..	9,429,257	8,697,751	(a)	(a)	(a)
X. Paints and varnishes ..	590,454	580,745	728,169	692,083	688,895
XI. Stones and minerals, etc. ..	806,815	900,904	1,112,895	1,123,680	1,240,710
XII. Metals, metal manufactures, and machinery ..	37,280,008	31,274,421	33,026,388	37,050,255	62,997,629
XIII. Rubber and leather, etc. ..	1,915,442	1,689,598	2,332,311	2,703,219	2,773,486
XIV. Wood and wicker, etc. ..	2,759,081	2,079,081	1,093,019	1,059,762	735,669
XV. Earthenware, etc. ..	2,047,362	1,864,084	1,915,298	1,630,334	1,913,493
XVI. Paper and stationery ..	6,609,609	6,185,576	7,242,402	5,796,741	3,804,193
XVII. Jewellery, etc. ..	1,581,455	1,431,605	1,482,193	829,646	756,926
XVIII. Optical, surgical, and scientific instruments ..	1,558,483	1,600,583	1,743,706	1,704,363	1,898,957
XIX. Drugs, chemicals, etc. ..	5,304,092	5,598,553	6,005,343	5,593,553	6,101,337
XX. Miscellaneous ..	7,112,733	6,788,858	418,801,462	413,996,687	424,372,478
XXI. Gold and silver; and bronze specie ..	2,241,806	2,843,202	(b)	(b)	(b)
Total ..	113,975,060	102,156,352	115,675,505	108,650,956	149,355,797
			(c) (d)		

(a) Total for Class IX. is included with Class XX.

(b) Not available for publication.

(c) Merchandise only. (d) Complete includes Governmental imports valued at £ stg. 16,094,000 for which Customs entries were not passed.

2. Exports.—In the following table the exports from Australia are shown in classes according to the same classification as for imports, distinguishing (A) Australian produce; (B) Other produce (re-exports); and (C) Total exports.

#### EXPORTS FROM AUSTRALIA: CLASSES.

*Australian Currency Values.*

Classes.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£ A.	£ A.	£ A.	£ A.	£ A.
I. Animal foodstuffs, etc. ..	25,576,036	27,222,912	34,323,280	32,346,713	27,952,144
II. Vegetable foodstuffs; non-alcoholic beverages, etc. ..	39,098,847	25,532,970	25,967,007	28,533,133	19,632,959
III. Alcoholic liquors, etc. ..	1,152,619	1,158,424	1,214,638	2,246,613	2,524,263
IV. Tobacco, etc. ..	206,528	237,948	153,084	476,533	761,831
V. Live animals ..	217,373	197,081	186,118	234,019	97,842
VI. Animal substances, etc. ..	53,741,716	47,192,519	61,562,131	44,180,292	64,508,037
VII. Vegetable substances, etc. ..	328,675	297,864	388,311	438,086	489,436
VIII. Apparel, textiles, etc. ..	582,009	446,032	718,362	1,090,335	7,951,118
IX. Oils, fats and waxes ..	784,601	611,033	1,192,522	927,836	1,288,888
X. Paints and varnishes ..	187,043	173,399	166,828	189,897	205,017
XI. Stones and minerals, etc. ..	3,305,551	2,667,077	2,406,965	1,652,254	1,739,451
XII. Metals, metal manufactures, and machinery ..	8,974,585	9,510,802	13,240,820	11,731,433	17,024,596
XIII. Rubber and leather, etc. ..	834,847	745,190	1,468,213	1,392,262	1,641,627
XIV. Wood and wicker, etc. ..	1,363,766	1,066,288	965,950	1,056,959	901,468
XV. Earthenware, etc. ..	191,816	209,637	163,805	224,426	340,942
XVI. Paper and stationery ..	300,098	364,928	320,677	373,042	403,763
XVII. Jewellery, etc. ..	133,625	105,803	112,310	91,113	107,383
XVIII. Optical, surgical, and scientific instruments ..	151,834	150,709	175,564	226,214	213,246
XIX. Drugs, chemicals, etc. ..	760,777	717,667	1,015,074	1,282,114	1,467,745
XX. Miscellaneous ..	800,749	915,711	1,152,657	3,489,682	8,205,719
XXI. Gold and silver; and bronze specie ..	14,930,762	15,951,167	(b)	(b)	(b)
Total (a) ..	153,623,857	135,475,761	146,894,316	132,783,856	157,457,475
			(c)	(c)	(c)

(a) Estimated British currency value, 1937-38, £ Stg. 122,675,000; 1938-39, £ Stg. 108,188,167; 1939-40, £ Stg. 117,280,891; 1940-41, £ Stg. 106,015,055; 1941-42, £ Stg. 123,714,550. (b) Not available for publication. (c) Merchandise only.

EXPORTS FROM AUSTRALIA : CLASSES—*continued.*

Classes.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
<b>B. OTHER PRODUCE : RE-EXPORTS.</b>					
<i>Australian Currency Values.</i>					
I. Animal foodstuffs, etc. ..	£ A. 20,756	£ A. 28,537	£ A. 51,979	£ A. 27,461	£ A. 28,660
II. Vegetable foodstuffs; non-alcoholic beverages, etc. ..	75,378	66,886	73,818	88,779	200,351
III. Alcoholic liquors, etc. ..	31,927	42,820	51,446	74,359	121,746
IV. Tobacco, etc. ..	74,399	112,997	137,437	71,376	79,417
V. Live animals ..	31,040	19,687	20,912	3,387	16,330
VI. Animal substances, etc. ..	32,458	136,279	73,188	15,458	15,074
VII. Vegetable substances, etc. ..	11,292	9,092	9,745	10,584	22,048
VIII. Apparel, textiles, etc. ..	203,104	222,819	139,084	220,461	352,591
IX. Oils, fats and waxes ..	164,253	101,711	197,809	165,869	378,416
X. Paints and varnishes ..	4,844	4,853	8,203	5,676	4,120
XI. Stones and minerals, etc. ..	3,938	2,443	2,198	2,976	825
XII. Metals, metal manufactures, and machinery ..	547,326	547,549	477,052	565,018	306,468
XIII. Rubber and leather, etc. ..	7,695	10,873	14,535	6,132	3,118
XIV. Wood and wicker, etc. ..	47,543	42,987	50,830	46,885	18,453
XV. Earthenware, etc. ..	9,502	9,428	4,546	7,915	11,523
XVI. Paper and stationery ..	75,548	128,388	100,443	42,545	40,937
XVII. Jewellery, etc. ..	81,360	74,188	26,584	14,410	38,268
XVIII. Optical, surgical, and scientific instruments ..	231,123	234,004	214,866	173,749	93,545
XIX. Drugs, chemicals, etc. ..	47,397	48,518	46,413	53,829	46,921
XX. Miscellaneous ..	238,822	164,647	134,154	356,858	92,212
XXI. Gold and silver; and bronze specie ..	2,016,558	3,011,845	(b)	(b)	(b)
Total (a) .. ..	3,956,263	5,020,551	(c)1,855,242	(c)1,953	(c)1,871,023

(a) Estimated British currency value, 1937-38, £ Stg. 3,161,889; 1938-39, £ Stg. 4,013,206; 1939-40, £ Stg. 1,481,231; 1940-41, £ Stg. 1,559,857; 1941-42, £ Stg. 1,493,831. (b) Not available for publication. (c) Merchandise only.

## C. TOTAL EXPORTS : AUSTRALIAN PRODUCE AND RE-EXPORTS.

*Australian Currency Values.*

I. Animal foodstuffs, etc. ..	£ A. 25,596,792	£ A. 27,251,449	£ A. 34,375,259	£ A. 32,374,174	£ A. 27,980,804
II. Vegetable foodstuffs; non-alcoholic beverages, etc. ..	39,174,225	25,599,856	26,040,825	28,621,912	19,833,310
III. Alcoholic liquors, etc. ..	1,184,546	1,201,244	1,266,084	2,320,972	2,646,009
IV. Tobacco, etc. ..	280,927	350,945	290,521	547,909	841,248
V. Live animals ..	248,413	216,768	207,030	237,400	114,172
VI. Animal substances, etc. ..	53,774,174	47,328,793	61,635,319	44,195,750	64,523,111
VII. Vegetable substances, etc. ..	339,967	306,956	308,056	449,570	511,484
VIII. Apparel, textiles, etc. ..	785,113	668,851	857,446	1,910,796	8,303,709
IX. Oils, fats and waxes ..	948,854	713,344	1,390,331	1,093,705	1,667,304
X. Paints and varnishes ..	191,887	178,252	175,031	195,573	209,137
XI. Stones and minerals, etc. ..	3,309,489	2,669,520	2,409,163	1,655,230	1,740,276
XII. Metals, metal manufactures, and machinery ..	9,521,911	10,058,351	13,717,872	12,296,451	17,331,064
XIII. Rubber and leather, etc. ..	842,542	756,063	1,482,748	1,398,394	1,644,745
XIV. Wood and wicker, etc. ..	1,411,309	1,109,275	1,016,780	1,103,844	919,921
XV. Earthenware, etc. ..	201,318	219,065	168,351	232,341	352,465
XVI. Paper and stationery ..	375,646	493,316	421,120	415,587	444,700
XVII. Jewellery, etc. ..	214,985	179,991	138,894	105,523	145,651
XVIII. Optical, surgical, and scientific instruments ..	382,957	384,713	390,430	399,963	306,791
XIX. Drugs, chemicals, etc. ..	808,174	766,185	1,061,487	1,335,943	1,514,666
XX. Miscellaneous ..	1,039,571	1,080,358	1,306,811	3,846,540	8,297,931
XXI. Gold and silver; and bronze specie ..	16,947,320	18,963,012	(b)	(b)	(b)
Total (a) .. ..	157,580,120	140,496,312	148,749,558 (c)	134,737,577 (c)	159,328,498 (c) (d)

(a) Estimated British currency value, 1937-38, £ Stg. 125,837,879; 1938-39, £ Stg. 112,201,372; 1939-40, £ Stg. 118,762,122; 1940-41, £ Stg. 107,574,912; 1941-42, £ Stg. 127,208,381. (b) Not available for publication. (c) Merchandise only. (d) Complete, includes £ A. 12,645,000 exported on Governmental account for which Customs entries were not passed.

3. Imports of Principal Articles.—The next table shows the quantity, where available for publication and the value of the principal articles imported into Australia during the last five years. The articles are shown in the order in which they appear in the detailed classification :—



## PRINCIPAL COMMODITIES IMPORTED : AUSTRALIA.

*British Currency Values.*

Article.		1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Fish, preserved in tins	lb.	28,323,075	28,902,983	25,275,936	16,986,371	4,558,049
	£	870,631	946,276	878,481	619,950	225,514
Tea .. ..	lb.	45,307,019	49,530,941	50,347,831	49,499,281	44,681,479
	£	2,394,335	2,481,883	2,894,264	2,884,731	3,919,448
Whisky .. ..	gal.	533,689	523,346	778,785	453,104	205,126
	£	566,759	553,537	851,462	521,294	299,780
Tobacco and preparations thereof	£	2,011,004	1,863,887	1,926,516	495,351	827,658
Copra .. ..	cwt.	387,580	484,181	54,195	637,922	624,282
	£	215,137	175,076	212,585	178,593	225,553
Fibres .. ..	£	1,016,969	897,755	1,298,942	1,719,973	2,360,409
Hides and skins .. ..	£	828,029	695,673	593,760	237,543	324,318
Pulp for paper-making	ton	64,932	37,704	38,398	37,038	41,422
	£	570,218	321,547	441,770	699,272	852,276
Seeds .. ..	£	578,045	515,679	719,450	755,365	818,189
Socks and stockings .. ..	£	48,754	43,508	33,610	18,184	35,001
Gloves .. ..	£	393,067	368,464	361,537	234,004	475,404
Hats and caps .. ..	£	190,137	179,422	174,874	106,858	114,205
Trimmings and ornaments	£	418,018	385,995	432,404	251,939	299,288
Other apparel and attire .. ..	£	946,314	887,459	782,409	856,847	1,020,147
Carpets and carpeting .. ..	£	1,326,305	1,099,728	1,395,999	1,032,874	1,138,911
Floorcloths and linoleums .. ..	£	609,364	562,394	625,445	535,680	662,389
Piece Goods—						
Canvas and duck .. ..	£	751,446	569,588	685,839	1,009,084	901,112
Cotton and linen .. ..	£	5,719,314	4,826,030	6,841,613	7,772,372	7,923,903
Silk and artificial silk .. ..	£	3,373,618	2,624,118	3,737,607	3,055,710	4,111,091
Woolen or containing wool .. ..	£	325,101	282,262	275,255	214,086	786,244
All other piece goods .. ..	£	1,805,914	1,578,337	2,414,359	2,272,115	2,890,844
Sewing silks, cottons, etc. .. ..	£	580,248	502,789	536,101	769,465	693,176
Bags and sacks .. ..	£	1,563,251	1,509,618	2,940,623	2,992,145	3,458,512
Yarns—						
Artificial silk .. ..	£	818,800	534,328	1,152,592	1,098,108	1,351,188
Cotton .. ..	£	596,019	394,328	491,250	720,604	714,825
Woolen .. ..	£	61,528	48,414	45,078	34,966	51,090
Other .. ..	£	51,982	62,760	54,028	51,060	57,242
Oils, in bulk—						
Kerosene .. ..	gal.	61,189,925	54,714,472	(b)	(b)	(b)
	£	833,892	660,898			
Lubricating (mineral) .. ..	gal.	18,752,582	15,519,442			
	£	989,265	780,861			
Petroleum .. ..	gal.	402,979,165	399,517,906			
	£	6,106,301	5,658,530			
Residual and solar .. ..	gal.	114,049,824	130,288,368			
	£	769,768	930,675			
Electrical machinery and appliances .. ..	£	3,524,395	3,678,755	2,966,255	2,480,973	2,622,279
Electrical cable and wire, covered .. ..	cwt.	276,264	258,064	(b)	(b)	(b)
	£	1,437,220	1,234,413	1,420,946	1,222,034	1,029,463
Agricultural machinery .. ..	£	219,159	207,479	172,711	66,102	33,425
Metal-working machinery .. ..	£	1,056,843	1,322,911	(b)	(b)	(b)
Motive-power machinery .. ..	£	3,736,542	2,495,285	2,267,471	2,836,022	4,255,282
Iron and steel—						
Pipes and tubes .. ..	£	634,267	451,144	(b)	(b)	(b)
Plate and sheet .. ..	£	4,414,430	2,614,283	(b)	(b)	(b)
Cutlery and platedware .. ..	£	571,539	524,487	588,215	615,900	633,958
Tools of trade .. ..	£	1,122,218	852,395	903,158	824,051	927,715
Motor cars, chassis, bodies, and parts .. ..	£	8,637,341	7,523,854	6,632,259	3,654,100	5,936,625
Rubber and rubber manufactures .. ..	£	1,786,441	1,545,366	2,227,188	2,602,661	2,641,164
Timber, undressed, includ- ing logs (a) .. ..	sup. ft.	406,782,623	348,093,462	(b)	(b)	(b)
	£	2,007,553	1,480,987	1,490,428	720,805	479,671
Crockery .. ..	£	591,251	559,176	632,405	604,035	740,709
Glass and glassware .. ..	£	916,724	800,470	725,376	557,407	741,461
Paper, printing .. ..	£	2,468,531	2,710,334	3,122,237	2,195,465	1,077,006
Stationery and paper manufactures .. ..	£	1,951,580	1,908,629	1,901,038	1,367,550	1,410,131
Cinematograph films .. ..	lin. ft.	77,509,452	73,859,662	77,214,210	71,583,802	85,205,968
	£	569,723	565,455	573,671	509,575	532,653
Drugs, chemicals, and fertilizers .. ..	£	5,304,092	5,598,553	6,005,343	5,593,553	6,101,337
Arms and explosives .. ..	£	540,018	1,080,108	(b)	(b)	(b)
Musical instruments, pianos, etc. .. ..	£	178,033	175,761	117,794	66,713	54,436
All other articles .. ..	£	34,968,634	31,883,688	(b)	(b)	(b)
Total Imports .. ..	£	113,975,060	102,156,352	115,675,595	108,650,056	149,355,792

(a) Excludes undressed timber not measured in super. ft.

(b) Not available for publication.

(c) Merchandise only.

4. Exports of Principal Articles of Australian Produce.—(i) *Quantities.* The following table shows the quantities of the principal articles of Australian produce exported during the period 1937-38 to 1941-42. The articles are shown in the order in which they appear in the detailed classification.

## PRINCIPAL COMMODITIES EXPORTED : QUANTITIES, AUSTRALIA.

Article.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Butter .. .. . centl.	1,973,456	2,295,428	2,623,191	1,957,086	1,303,472
Cheese .. .. . "	272,454	359,236	430,558	330,078	314,574
Eggs in shell .. .. . doz.	11,287,363	10,144,344	10,279,346	17,881,732	6,306,532
Beef .. .. . centl.	2,938,035	2,719,638	2,852,421	1,986,250	1,172,565
Lamb .. .. . "	1,595,562	1,583,327	2,010,394	2,199,545	1,643,010
Mutton .. .. . "	422,462	281,558	476,278	189,709	106,389
Pork .. .. . "	339,594	307,164	522,028	748,896	342,404
Milk and cream .. .. . "	247,103	191,039	322,194	563,150	756,505
Fruits, dried .. .. . "	1,457,598	1,681,270	1,157,083	1,467,391	1,488,938
" fresh .. .. . "	2,556,004	2,752,381	1,222,089	351,626	226,746
Barley .. .. . "	2,398,234	1,309,084	1,945,231	456,350	517,194
Wheat .. .. . "	56,702,254	37,877,414	28,555,564	28,174,460	13,387,573
Flour .. .. . "	12,609,073	14,501,304	13,686,055	15,438,107	8,273,681
Sugar (cane) .. .. . cwt.	8,563,500	8,860,280	10,488,640	7,494,140	3,975,780
Wine .. .. . gal.	3,897,086	3,719,401	3,619,804	1,658,007	1,393,803
Tobacco, manufactured .. centl.	8,060	9,665	9,264	10,511	14,883
Wool (in terms of greasy wool) ..	8,554,117	9,469,604	7,949,041	4,908,801	7,363,450
Pearl-shell .. .. . cwt.	53,289	52,532	48,618	37,038	36,868
Sandalwood .. .. . "	24,813	32,962	29,437	34,885	15,195
Tallow (unrefined) .. .. . "	541,136	562,500	805,733	559,470	674,648
Coal .. .. . ton	392,873	382,085	264,649	330,103	241,004
Concentrates .. .. . cwt.	5,411,613	5,916,685	} (a)	(u)	(a)
Copper .. .. . "	38,121	21,555			
Lead .. .. . "	4,089,895	4,099,919			
Zinc—bar, block, dust .. .. . "	618,858	892,630			
Tin—ingots .. .. . "	14,665	29,431	19,826	24,942	3,487
Timber, undressed, including Logs (b) .. .. . sup. ft.	101,033,636	77,833,352	62,676,901	(u)	(u)
Soap .. .. . centl.	49,007	49,871	67,720	82,905	79,002

(a) Not available for publication.

(b) Excludes undressed timber not measured in super. ft.

(ii) *Values.* The values of the principal articles of Australian produce exported during each of the last five years are given in the following table:—

## PRINCIPAL COMMODITIES EXPORTED : VALUES, AUSTRALIA.

*Australian Currency Values.*

Article.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£A.	£A.	£A.	£A.	£A.
Butter .. .. .	10,781,124	12,891,837	15,894,718	11,973,485	8,124,975
Cheese .. .. .	845,110	1,073,931	1,440,131	1,543,909	1,428,111
Eggs in shell .. .. .	686,713	638,159	597,854	1,122,758	402,795
Meats .. .. .	12,250,041	11,776,637	15,109,128	15,815,020	14,094,013
Milk and cream .. .. .	963,836	791,011	1,126,017	1,528,023	2,059,355
Fruits, dried .. .. .	2,683,856	2,864,676	1,993,686	2,487,608	2,567,621
" fresh .. .. .	2,054,322	2,022,874	1,166,588	393,092	238,048
" preserved in liquid .. .. .	1,287,962	1,267,070	1,349,484	802,254	908,250
Barley .. .. .	805,943	341,935	520,521	141,343	171,690
Wheat .. .. .	20,906,601	8,734,974	7,557,370	9,247,836	4,644,793
Flour .. .. .	6,032,321	4,540,210	5,231,485	7,427,132	4,191,382
Sugar (cane) .. .. .	4,026,576	4,177,584	6,185,797	4,880,289	2,636,403
Wine .. .. .	943,241	981,143	933,767	515,551	497,586
Tobacco, manufactured .. .. .	192,217	225,025	119,156	219,074	382,827
Hides and skins .. .. .	6,180,776	4,094,754	4,157,709	4,098,016	5,981,589
Wool .. .. .	46,982,679	42,629,461	56,848,399	39,645,396	58,040,901
Pearl-shell .. .. .	345,580	244,266	224,646	196,263	252,766
Sandalwood .. .. .	36,831	42,330	52,374	61,683	23,272
Tallow (unrefined) .. .. .	620,869	483,034	847,973	561,660	841,719
Coal .. .. .	354,754	347,054	251,055	331,532	259,093
Concentrates .. .. .	2,289,672	1,846,931	(c)	(c)	(c)
Copper .. .. .	33,639	15,656	(c)	(c)	(c)
Lead .. .. .	4,913,762	4,266,566	(c)	(c)	(c)
Zinc—bar, block, slabs, ingots .. .. .	752,090	887,421	(c)	(c)	(c)
Tin—ingots .. .. .	187,469	370,137	(c)	(c)	(c)
Leather .. .. .	703,503	626,198	1,327,057	868,793	766,861
Timber, undressed, including logs (a) .. .. .	1,202,417	926,504	751,535	712,390	700,014
Soap .. .. .	75,878	74,594	102,482	194,926	247,364
Gold .. .. .	13,910,680	14,958,633	(c)	(c)	(c)
Silver .. .. .	1,018,355	992,486	(c)	(c)	(c)
All other articles .. .. .	9,555,010	10,342,670	23,105,384	28,014,023	47,096,047
Total Exports (Australian Produce)					
(b) .. .. .	153,623,857	135,475,761	146,894,316	132,783,856	157,457,475

(a) Excludes undressed timber not measured in super. feet. (b) Estimated British currency value—1937-38, £ Stg. 122,675,990; 1938-39, £ Stg. 108,188,167; 1939-40, £ Stg. 117,280,890; 1940-41, £ Stg. 106,015,055; 1941-42, £ Stg. 125,714,550. (c) Not available for publication. (d) Merchandise only.

5. **Imports of Merchandise, Specie and Bullion.**—The table hereunder gives the value in British currency of imports into Australia during each of the last five years grouped under the heading—Merchandise, and Specie and Bullion. The imports of merchandise are shown under the sub-headings of “free” and “dutiable” goods :—

## IMPORTS OF MERCHANDISE, SPECIE AND BULLION : AUSTRALIA.

*British Currency Values.*

Year.	Merchandise.			Specie and Bullion.	Total Imports.
	Free Goods.	Dutiable Goods.	Total Merchandise.		
	£ Stg.	£ Stg.	£ Stg.	£ Stg.	£ Stg.
1937-38 ..	44,211,749	67,521,505	111,733,254	2,241,806	a113,975,060
1938-39 ..	40,665,193	58,647,957	99,313,150	2,843,202	a102,156,352
1939-40 ..	50,294,728	65,380,777	b115,675,505	(c)	(c)
1940-41 ..	62,600,283	46,049,773	b108,650,056		
1941-42 ..	99,180,381	50,175,416	b149,355,797		

(a) Estimated Australian currency value—1937-38, £A.142,753,763; 1938-39, £A.127,950,831.  
 (b) 1939-40, £A.144,883,570; 1940-41, £A.136,084,197; 1941-42, £A.187,068,136. (c) Not available for publication.

6. **Exports of Merchandise, Specie and Bullion.**—The next table shows the recorded value of exports from Australia during each of the last five years, grouped under the headings—Merchandise, and Specie and Bullion, giving the exports of Australian Produce and Other Produce separately :—

## EXPORTS OF MERCHANDISE, SPECIE AND BULLION : AUSTRALIA.

Year.	Merchandise.			Specie and Bullion.			Total Exports.
	Australian Produce.	Other Produce.	Total Merchandise.	Australian Produce.	Other Produce.	Total Specie and Bullion.	
	£	£	£	£	£	£	£
1937-38 {	(a)138,693,095	1,939,705	140,632,800	14,930,762	2,016,558	16,947,320	157,580,120
	(b)110,733,009	1,548,667	112,281,676	11,942,981	1,613,222	13,556,203	125,837,879
1938-39 {	(a)119,524,591	2,008,706	121,533,300	15,951,167	3,011,845	18,963,012	140,496,312
	(b) 95,428,818	1,603,757	97,032,575	12,759,349	2,409,448	15,168,797	112,201,372
1939-40 {	(a)146,894,316	1,855,242	148,749,558	(c)	(c)	(c)	(c)
	(b)117,280,891	1,481,231	118,762,122				
1940-41 {	(a)132,783,856	1,953,721	134,737,577	(c)	(c)	(c)	(c)
	(b)106,015,055	1,559,857	107,574,912				
1941-42 {	(a)157,457,475	1,871,023	159,328,498	(c)	(c)	(c)	(c)
	(b)125,714,550	1,493,831	127,208,381				

(a) Australian currency values.  
 publication.

(b) British currency values.

(c) Not available for

7. **Imports in Tariff Divisions.**—In the following table the imports into Australia during the last five years have been classified in accordance with the sixteen divisions of the Customs Tariff.



## IMPORTS IN TARIFF DIVISIONS : AUSTRALIA.

*British Currency Values.*

Tariff Division.	Imports.				
	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£ Stg.	£ Stg.	£ Stg.	£ Stg.	£ Stg.
I. Ale, Spirits, and Beverages .. ..	940,419	914,006	1,258,250	750,062	495,378
II. Tobacco and preparations thereof ..	2,011,004	1,863,887	1,926,516	495,351	912,784
III. Sugar .. ..	31,545	40,034	43,961	46,791	74,792
IV. Agricultural Products and Groceries ..	6,438,463	6,331,568	7,522,654	6,816,246	7,359,973
V. Textiles, Felts and Furs, and Manufactures thereof, and Attire .. ..	18,648,002	15,921,221	21,993,120	21,310,113	25,353,237
VI. Metals and Machinery	26,736,437	22,168,275	21,920,137	25,127,592	29,022,093
VII. Oils, Paints, and Varnishes .. ..	10,269,721	9,559,838	13,610,874	9,886,314	13,779,610
VIII. Earthenware, Cement, China, Glass, and Stone .. ..	2,581,309	2,308,556	2,407,329	2,108,312	2,429,076
IX. Drugs and Chemicals	3,821,966	4,035,376	4,400,467	4,221,101	4,570,606
X. Wood, Wicker, and Cane .. ..	2,770,894	2,114,721	2,079,313	1,118,745	753,210
XI. Jewellery and Fancy Goods .. ..	2,203,995	2,045,947	2,120,209	1,513,943	1,546,211
XII. Hides, Leather, and Rubber .. ..	2,142,089	1,875,175	2,756,456	2,912,570	2,944,848
XIII. Paper and Stationery	7,133,843	6,473,254	7,638,922	6,529,865	4,781,139
XIV. Vehicles .. ..	10,415,428	9,263,302	11,273,138	12,058,149	22,800,931
XV. Musical Instruments	178,033	285,638	208,753	66,713	54,436
XVI. Miscellaneous .. ..	10,914,478	10,400,018	10,313,008	10,379,812	29,565,187
— Free Goods not specially mentioned in Tariff .. ..	4,495,628	3,712,334	4,196,398	3,308,377	2,912,286
Total Merchandise ..	111,733,254	99,313,150	115,675,505	108,650,056	149,355,797
Specie and Bullion ..	2,241,806	2,843,202	(a)	(a)	(a)
Grand Total ..	113,975,060	102,156,352	(a)	(a)	(a)

(a) Not available for publication.

8. Imports and Net Customs Revenue.—The percentage of net Customs revenue collected on the total value of all merchandise imported in each year was as follows :—1937-38, 20.4 per cent. ; 1938-39, 21.9 per cent. ; 1939-40, 20.6 per cent. ; 1940-41, 18.0 per cent. ; and 1941-42, 11.1 per cent. Primage duty was in force during these years, and adding this to net Customs revenue, the percentages were as follows :—1937-38, 23.5 per cent. ; 1938-39, 25.0 per cent. ; 1939-40, 23.7 per cent. ; 1940-41, 20.5 per cent. ; and 1941-42, 12.7 per cent. The percentages of net Customs revenue, omitting primage, on the total value of dutiable goods only were—1937-38, 33.7 per cent. ; 1938-39, 36.9 per cent. ; 1939-40, 36.4 per cent. ; 1940-41, 42.5 per cent. ; and 1941-42, 32.9 per cent. The calculations are based on uniform currency values and on the assumption that the value of clearances approximated to the value of imports during the same period.

9. **Protective and Revenue Customs Duties.**—In the following table the value of goods cleared for home consumption classified under protective and revenue duties and the gross duty collected are shown for the United Kingdom and other countries :—

**IMPORTS (CLEARANCES) CLASSIFIED UNDER PROTECTIVE AND REVENUE DUTIES : AUSTRALIA.**

*Australian Currency Values.*

Item.	1937-38.			1938-39.			1939-40.		
	United Kingdom.	Other Countries.	Total.	United Kingdom.	Other Countries.	Total.	United Kingdom.	Other Countries.	Total.
	£A '000.	£A '000.	£A '000.	£A '000.	£A '000.	£A '000.	£A '000.	£A '000.	£A '000.
Dutiable Goods :—									
Protective.. ..	11,940	9,758	21,698	10,981	9,479	20,460	10,866	8,929	19,795
Revenue .. ..	16,141	43,917	60,058	13,623	38,036	51,659	16,674	43,146	59,820
<b>Total Dutiable Goods</b>	<b>28,081</b>	<b>53,675</b>	<b>81,756</b>	<b>24,604</b>	<b>47,515</b>	<b>72,119</b>	<b>27,540</b>	<b>52,075</b>	<b>79,615</b>
<b>Free Goods .. ..</b>	<b>28,151</b> (a)	<b>26,842</b> (a)	<b>58,183</b>	<b>22,607</b> (a)	<b>26,119</b> (a)	<b>54,536</b>	<b>24,355</b> (a)	<b>33,447</b> (a)	<b>68,155</b>
<b>Total All Goods</b>	<b>56,232</b> (a)	<b>80,517</b> (a)	<b>139,939</b>	<b>47,211</b> (a)	<b>73,634</b> (a)	<b>126,655</b>	<b>51,895</b> (a)	<b>85,522</b> (a)	<b>147,770</b>

**PERCENTAGE OF TOTAL GOODS CLEARED FOR HOME CONSUMPTION.**

	%	%	%	%	%	%	%	%	%
Dutiable Goods :—									
Protective.. ..	8.6	6.9	15.5	8.6	7.5	16.1	7.4	6.0	13.4
Revenue .. ..	11.5	31.4	42.9	10.8	30.0	40.8	11.3	29.2	40.5
<b>Total Dutiable Goods..</b>	<b>20.1</b>	<b>38.3</b>	<b>58.4</b>	<b>19.4</b>	<b>37.5</b>	<b>56.9</b>	<b>18.7</b>	<b>35.2</b>	<b>53.9</b>
<b>Free Goods .. ..</b>	<b>20.1</b>	<b>19.2</b>	<b>41.6</b>	<b>17.9</b>	<b>20.6</b>	<b>43.1</b>	<b>16.5</b>	<b>22.6</b>	<b>46.1</b>
<b>Total All Goods .. ..</b>	<b>40.2</b>	<b>57.5</b>	<b>100.0</b>	<b>37.3</b>	<b>58.1</b>	<b>100.0</b>	<b>35.2</b>	<b>57.8</b>	<b>100.0</b>

**GROSS CUSTOMS DUTY COLLECTED.**

	£A '000.	£A '000.	£A '000.	£A '000.	£A '000.	£A '000.	£A '000.	£A '000.	£A '000.
Dutiable Goods :—									
Protective.. ..	2,335	4,040	6,375	2,139	3,991	6,130	1,999	3,585	5,584
Revenue .. ..	1,984	21,199	23,183	1,783	20,449	22,232	2,228	23,238	25,466
<b>Total Dutiable Goods..</b>	<b>4,319</b>	<b>25,239</b>	<b>29,558</b>	<b>3,922</b>	<b>24,440</b>	<b>28,362</b>	<b>4,227</b>	<b>26,823</b>	<b>31,050</b>

**AVERAGE AD VALOREM RATE OF DUTY ON GOODS CLEARED FOR HOME CONSUMPTION.**

	%	%	%	%	%	%	%	%	%
Dutiable Goods :—									
Protective.. ..	19.6	41.4	29.4	19.5	42.1	30.0	18.4	40.2	28.2
Revenue .. ..	12.3	48.3	38.6	13.1	53.8	43.0	13.4	53.9	42.6
<b>Total Dutiable Goods..</b>	<b>15.4</b>	<b>47.0</b>	<b>36.2</b>	<b>15.9</b>	<b>51.4</b>	<b>39.3</b>	<b>15.3</b>	<b>51.5</b>	<b>39.0</b>

(a) Excludes goods admitted free for Commonwealth, Consuls, etc., and free reimported not distributed according to United Kingdom and other origin.

## § 10. Ships' Stores.

Prior to 1906 goods shipped in Australian ports on board oversea vessels as ships' stores were included in the general exports. From 1906, ships' stores have been specially recorded as such, and have been omitted from the export figures. The value of these stores shipped each year during the period 1932-33 to 1941-42, showing fuel oils separately, is given in the following table:—

## VALUE OF STORES SHIPPED ON OVERSEA VESSELS—AUSTRALIA.

Period.	Fuel Oils.	All Stores (including Fuel Oils).(a)	Period.	Fuel Oils.	All Stores (including Fuel Oils).(a)
	£ A.	£ A.		£ A.	£ A.
1932-33 ..	516,653	1,621,640	1937-38 ..	610,080	2,091,249
1933-34 ..	527,683	1,620,907	1938-39 ..	606,515	2,105,619
1934-35 ..	570,920	1,712,547	1939-40 ..	921,144	2,539,848
1935-36 ..	562,927	1,808,291	1940-41 ..	1,674,133	3,528,555
1936-37 ..	493,327	1,740,437	1941-42 ..	3,395,337	5,791,983

(a) Estimated British currency value—1932-33, £ Stg. 1,294,723; 1933-34, £ Stg. 1,294,137; 1934-35, £ Stg. 1,367,303; 1935-36, £ Stg. 1,443,745; 1936-37, £ Stg. 1,389,570; 1937-38, £ Stg. 1,669,660; 1938-39, £ Stg. 1,681,133; 1939-40, £ Stg. 2,027,823; 1940-41, £ Stg. 2,817,210; 1941-42, £ Stg. 4,624,338.

In addition to fuel oils, the principal items of ships' stores supplied to oversea vessels in 1941-42 were—Bunker coal, £A509,069; meats, £A333,157; tobacco and cigarettes, £A118,694; vegetables, £A91,980; ale, beer and porter, £A94,458; butter, £A64,305; and fish, £A58,256.

The net Customs duty collected on ships' stores carried to Australia on oversea vessels and consumed in Australian waters amounted in 1941-42 to £A33,191.

## § 11. Movement of Specie and Bullion.

1. Imports and Exports.—The following tables show the values of gold and silver specie and bullion, and of bronze specie imported into and exported from Australia during the years 1934-35 to 1938-39.

Particulars for subsequent years are not available for publication.

## IMPORTS AND EXPORTS, SPECIE AND BULLION : AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
IMPORTS.					
	£ Stg.	£ Stg.	£ Stg.	£ Stg.	£ Stg.
Gold—Specie ..	206	1,093	69	1,070	14,637
Bullion ..	1,679,380	1,634,417	1,998,311	2,191,969	2,757,488
Total ..	1,679,586	1,635,510	1,998,380	2,193,039	2,772,125
Silver—Specie ..	3,057	77,939	34,092	29,576	50,738
Bullion ..	15,704	17,333	16,211	18,866	20,143
Total ..	18,761	95,272	50,303	48,442	70,881
Bronze—Specie ..	142	345	199	325	196
GRAND TOTAL(a)	1,698,489	1,731,127	2,048,882	2,241,806	2,843,202

(a) Estimated Australian currency value—1934-35, £A2,127,357; 1935-36, £A2,168,237; 1936-37, £A2,566,225; 1937-38, £A2,807,862; 1938-39, £A3,561,111.



## IMPORTS AND EXPORTS, SPECIE AND BULLION: AUSTRALIA—continued.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
EXPORTS.					
	£A.	£A.	£A.	£A.	£A.
Gold—Specie ..	206,618	994,924	181,785	96,820	110,204
Bullion ..	9,609,980	11,532,943	13,705,405	15,815,523	17,843,088
Total ..	9,816,598	12,527,867	13,887,190	15,912,343	17,953,292
Silver—Specie ..	106,122	151,671	101,947	43,232	42,726
Bullion ..	530,822	874,495	587,974	989,296	966,716
Total ..	636,944	1,026,166	689,921	1,032,528	1,009,442
Bronze—Specie ..	2,899	2,213	3,266	2,449	278
Total ..					
Australian Produce	8,694,612	11,700,284	12,495,809	14,930,762	15,951,167
Other Produce ..	1,761,829	1,855,962	2,084,568	2,016,558	3,011,845
GRAND TOTAL(a)	10,456,441	13,556,246	14,580,377	16,947,320	18,963,012

(a) Estimated British currency value—1934-35, £ Stg. 8,365,212; 1935-36, £ Stg. 10,843,354; 1936-37, £ Stg. 11,663,195; 1937-38, £ Stg. 13,556,203; 1938-39, £ Stg. 15,168,797.

2. Imports and Exports by Countries.—The next table shows the imports and exports of specie and bullion from and to various countries during the year 1938-39:—  
Particulars for subsequent years are not available for publication.

## IMPORTS AND EXPORTS OF SPECIE AND BULLION BY COUNTRIES: AUSTRALIA, 1938-39.

Country.	Imports.			Exports.		
	Specie.	Bullion.	Total.	Specie.	Bullion.	Total.
	£ Stg.	£ Stg.	£ Stg.	£A.	£A.	£A.
Australia (a) ..	50,918	..	50,918	..	..	..
United Kingdom ..	13,331	976	14,307	109,240	1,909,128	2,018,368
Ceylon ..	..	..	..	..	903,829	903,829
India ..	..	..	..	..	23,533	23,533
Malaya (British) ..	..	..	..	200	..	200
New Zealand ..	..	379,144	379,144	5,446	459	5,905
Pacific Islands—						
Fiji ..	..	699,824	699,824	..	..	..
Gilbert and Ellice Islands Colony ..	..	..	..	140	..	140
Nauru ..	..	..	..	500	..	500
Papua ..	..	85,461	85,461	615	..	615
Solomon Islands ..	..	582	582	75	..	75
Territory of New Guinea ..	..	1,600,691	1,600,691	30,581	..	30,581
Union of South Africa ..	..	10,044	10,044	..	..	..
Total, British Countries ..	64,249	2,776,722	2,840,971	146,797	2,836,949	2,983,746
France ..	..	..	..	..	7,327	7,327
Germany ..	..	..	..	..	7,745	7,745
Netherlands ..	..	..	..	..	..	..
Indies ..	..	..	..	6,403	..	6,403
Switzerland ..	..	869	869	..	..	..
United States of America ..	1,322	40	1,362	8	15,957,783	15,957,791
Total, Foreign Countries ..	1,322	909	2,231	6,411	15,972,855	15,979,266
GRAND TOTAL ..	65,571	2,777,631	2,843,202	153,208	18,809,804	18,963,012
			(b)			(c)

(a) Australian produce reimported.

(b) Estimated Australian currency value—£A3,561,111.

(c) Estimated British currency value—£ Stg. 15,168,797.

## § 12. Exports according to Industries.

1. **Classification.**—The following table gives an analysis of the exports of Australian produce according to the main classes of industry in which the goods were produced for the years 1940-41 and 1941-42 in comparison with those for the year 1913. The index-number based on the year 1913 shows the variations in the total recorded value only of exports in each industrial group, and has not been adjusted either for price-changes or in accordance with the variation of the Australian £ in relation to sterling.

A graph is published on page 406 of this chapter which shows the value of exports of Australian produce according to industrial groups from 1920-21 to 1941-42.

### EXPORTS OF AUSTRALIAN PRODUCE ACCORDING TO INDUSTRIAL ORIGIN. VALUE OF EXPORTS.

Industrial Group.	1913.(a)		1940-41.		1941-42.	
	£A.	Index No.	£A.	Index No.	£A.	Index No.
Agriculture .. ..	10,677,734	100	28,270,886	265	18,780,646	176
Pastoral .. ..	42,057,346	100	60,132,922	143	79,463,602	189
Dairy and Farmyard ..	3,854,734	100	17,005,424	441	13,632,468	354
Mines and Quarries (b) ..	21,926,310	100	22,472,392	102	23,455,574	107
Fisheries .. ..	424,849	100	228,109	54	329,718	78
Forestry .. ..	1,106,549	100	1,053,966	95	859,116	78
<b>Total, Primary Produce</b>	<b>80,047,522</b>	<b>100</b>	<b>129,163,699</b>	<b>161</b>	<b>136,521,124</b>	<b>171</b>
<b>Manufacturing .. ..</b>	<b>2,304,693</b>	<b>100</b>	<b>20,352,758</b>	<b>883</b>	<b>36,115,143</b>	<b>1,567</b>
<b>Total .. ..</b>	<b>82,352,215</b>	<b>100</b>	<b>149,516,457</b> (c)	<b>182</b>	<b>172,636,267</b>	<b>210</b>

(a) Base year. (b) Australian production of gold substituted for exports of gold each year.  
(c) Estimated British currency value, 1940-41, £ Stg. 119,374,416, index-number 145; 1941-42, £ Stg. 137,833,346, index-number 167.

2. **Relative Importance of Industrial Groups.**—In the previous table the value of commodities in each industrial group of exports of Australian produce is that recorded at date of shipment from Australia, with the exception that the value of the production of gold in Australia in each year has been substituted in the Mines and Quarries group for actual shipments of gold in each year. This has been done to eliminate the exports of gold for monetary purposes. In order of importance the pastoral group occupied the highest place and in 1913 the value of commodities included in this group represented 51.1 per cent. of the total exports, as compared with 40.2 per cent. in 1940-41, and 46.0 per cent. in 1941-42.

Exports of agricultural produce rank next in importance and were lower in 1941-42 than in the previous year. From 13.0 per cent. of the total exports in 1913, agricultural produce increased to 18.9 per cent. in 1940-41 but declined again to 10.9 per cent. in 1941-42.

According to value, exports of dairy and farmyard produce increased from 4.7 per cent. in 1913 to 11.4 per cent. in 1940-41, but also declined in 1941-42 to 7.9 per cent. Though the products of mines and quarries declined seriously subsequently to the year 1913, a recovery has been made in more recent years, the figures for 1941-42 representing 13.6 per cent. of the total exports. The manufacturing groups of exports, which represented 2.8 per cent. in 1913, increased to 20.9 per cent. in 1941-42.

Compared with the year 1913, exports of agricultural produce in 1941-42 showed an increase of 76 per cent., pastoral produce 89 per cent., dairy and farmyard produce 254 per cent., mines and quarries 7 per cent., the manufacturing group 1,467 per cent., and total exports 110 per cent. The exports of the products of fisheries and forests were 22 per cent. lower in 1941-42 than in 1913.

3. **Australian Production and Exports according to Industry.**—The following table shows the total values of Australian production and Australian exports during the period of ten years, 1931–32 to 1940–41, classified according to industries; the proportion of each industrial group to total production and to total exports; and in the last column the percentage exported of the production of each industrial group:—

**VALUE OF AUSTRALIAN PRODUCTION AND EXPORTS, ACCORDING TO INDUSTRY: 1931–32 TO 1940–41.**

*Australian Currency Values.*

Industrial Group.	Value of Production during Ten Years.	Percentage on Total Production.	Value of Exports during Ten Years.	Percentage on Total Exports.	Percentage Exported of the Production in each Industrial Group.
	£A'000.	%	£A'000.	%	%
Agriculture .. ..	793,007	18.76	294,599	22.29	37.15
Pastoral .. ..	895,238	21.17	619,158	46.84	69.16
Dairy and Farmyard .. ..	506,226	11.97	133,212	10.08	26.31
Mining .. ..	258,860	6.12	181,062	13.70	69.95
Forestry and Fisheries .. ..	121,406	2.87	12,076	0.91	9.95
<b>Total, Primary Produce..</b>	<b>2,574,737</b>	<b>60.89</b>	<b>1,240,107</b>	<b>93.82</b>	<b>48.16</b>
<b>Manufacturing .. ..</b>	<b>1,653,333</b>	<b>39.11</b>	<b>81,642</b>	<b>6.18</b>	<b>(a)4.94</b>
<b>Total .. ..</b>	<b>4,228,070</b>	<b>100.00</b>	<b>1,321,749</b>	<b>100.00</b>	<b>31.26</b>

(a) See letterpress in the concluding paragraph of this section.

The figures relating to value of production and value of exports are subject to the qualifications mentioned previously. A period of ten years is embraced, and the values of production and of exports therein give a very fair index of the relative importance of the several industrial groups. Of the total production 60.89 per cent. was classified as primary produce and 39.11 per cent. as manufactured articles. The main contributing groups in the primary produce section were pastoral with 21.17 per cent., agriculture with 18.76 per cent., and dairy and farmyard produce with 11.97 per cent. of the total production.

Exports of primary produce represented 93.82 per cent. of the total exports. The primary groups in order of value were pastoral 46.84 per cent., agricultural 22.29 per cent., mining 13.70 per cent., dairy and farmyard 10.08 per cent., and forestry and fisheries 0.91 per cent. The manufacturing group accounted for the other 6.18 per cent.

The figures in the last column of the table are of special interest, as they show the percentage exported of the production of each industrial group. Of the total primary production during the period, 48.16 per cent. was exported. Approximately 37 per cent. of the agricultural production, 69 per cent. of the pastoral production, 26 per cent. of the dairy and farmyard production, 70 per cent. of the mining production, and 10 per cent. of the production of forestry and fisheries combined were sent abroad.

The total exports of gold bullion and specie are not included in the value of exports of the mining industry, the actual production of gold during the period being taken.

On account of the inherent difficulties of classifying production and exports by industries, the figures given for the manufacturing industry should not be interpreted too literally. In the first place, the value of manufacturing "production" stated is not the total value of output, but only the "value added" by manufacturing processes, while the value of manufactured exports represents the total value of the goods, including raw materials, etc. Secondly, some of the exported goods classified as primary produce have been increased in value by manufacturing processes, but have not been changed in form sufficiently to warrant their inclusion as manufactured products, e.g., flour, butter and sugar.



### § 13. Australian Index of Export Prices.

1. *The Old Annual Series.*—With the exception of a few years after 1929–30 an annual index of export prices has been published by this Bureau since its inception. An index was at first obtained by valuing the exports (other than gold) of each successive year at the prices of 1901, and dividing the values so obtained into the export values actually recorded. These computations were carried back to 1901. In 1918 the procedure was changed and brought into harmony with the methods adopted by the Bureau for constructing other price indexes. The average quantities of the principal exports (other than gold) for the nineteen and a half years from 1st January, 1897, to 30th June, 1916, were taken, and valued at the prices of each successive year. Comparisons of the resulting totals for different years were assumed to give the required comparisons of export price-levels for those years. The two methods would, however, give the same results only if the proportion of different exports for each year in question was the same as the average for the nineteen and a half years. The proportion was, in fact, varying appreciably from year to year with the seasons. The old index was, therefore, based on a different system of weighting in each year, so that the results were not comparable for different years. The new method gave comparable and satisfactory results so long as the proportion of different exports was not widely different from the average of 1897 to 1916. After the War of 1914–19, however, the relative importance of different exports changed considerably. By about 1930 it began to appear that the change was great enough to throw some doubt on the accuracy of the index. It was published with increasing reluctance until 1929–30, after which it was withdrawn from publication.

Following that year endeavours were made to design and compile new series of index-numbers which would reflect more accurately the short- and intermediate-period fluctuations in export prices.

2. *The New Monthly Series.*—An attempt was made to overcome some of the difficulties occasioned by variations in the proportions of the different exports by compiling two separate series of monthly index-numbers. The first series was compiled in very much the same way as the old annual index-numbers, although certain important changes have been made in the data utilized. These are described below. For the present it may be noted that the purpose of this index is to provide comparisons, over a limited number of years, of the level of prices of those commodities normally exported from Australia, making no allowance for any benefit or disadvantage accruing from variations during the period in the relative proportions of the different kinds of exports. It is thus an index purely of price changes. The second series was designed for shorter-period comparisons—from one or more months of the current year to the corresponding months of the previous year. The latter is compiled in such a way as to take closer account of the actual quantities of each article exported at current prices; and hence to indicate with rather greater accuracy the extent to which price-movements have affected the actual value of our current exports. It will be clear, therefore, that the two series are designed to measure different things, any differences between the results being explicable on wider grounds than mere differences in formulae.

Reference has already been made to the fact that the data on which the new series are based differ from those utilized in the old series of annual index-numbers. These changes apply to both of the new series.

The most important change was the use of actual (or calculated) export parities, based on actual price quotations, in place of the "unit-values" declared at the Customs. Declared unit values are not satisfactory even in an annual index-number, partly because the returns are not always sufficiently accurate, and partly because there is a constant variation in the proportions of different grades and qualities included in the actual exports of any given period. An obvious example of the latter type of inaccuracy is furnished by the case of wool, the poorer grades of which are shipped during certain months of the off-season. In a monthly series of index-numbers, declared unit-values are even less satisfactory, as the difficulties are greatly magnified over short periods, during which the inaccuracies have little chance of averaging out.

Moreover, the export parities have in all cases been based on prices f.o.b. Australian ports. Where freight and selling charges form an appreciable percentage of the selling price, the use of unadjusted oversea quotations results in some distortion of the amplitude of the percentage fluctuations in prices.

The old index took no account of gold exports. The omission is natural and reasonable for countries which produce little or no gold. For gold-producing countries, although some exports of gold would be irrelevant (e.g., the Australian shipments of gold reserves during the depression), the exports of newly-produced gold should be taken into account. In the new series, therefore, gold is included, but the weight given to it is not the quantity exported but the quantity produced.

Each series of index-numbers takes account of 20 items, which constitute about 85 per cent. of the total value of exports of merchandise and silver and gold production.

3. **Monthly Index (Fixed Weights).**—The original "multipliers" used for the first series of index-numbers were, in round figures, the average annual exports (or production, in the case of gold) during the five years 1928-29 to 1932-33. This period was chosen some time ago as being fairly representative of the mutual relationship of the different export commodities over the period from 1928 to 1933 and, so far as it was possible to judge at the time, over the ensuing few years. As from July, 1936, the "multipliers", were revised to bring them into accord with observed changes in the composition of Australian exports. They are now based on the average annual exports (production in the case of gold) during the three years 1933-34 to 1935-36. The break of continuity has been bridged by the usual method of splicing.

The twenty items, together with the units of quantity and the "multipliers", are given in the following table. It should be noted that (i) the "multiplier" allotted to wheat has been increased to take into account the "wheat equivalent" of flour exported; (ii) that allotted to greasy wool has been increased to take into account the "greasy equivalent" of scoured wool, tops and wool on skins; and (iii) those allotted to metals have been increased to take into account the metallic contents of ores and concentrates exported. This is the only satisfactory method of dealing with these commodities, for which it is not possible to secure satisfactory export price quotations in their own right.

EXPORT PRICE INDEX : WEIGHTING SYSTEM (FROM 1st JULY, 1936).

Item.	Unit of Quantity.	Quantity "Multipliers" for New Index-numbers.	Percentage Value Weights if applied to 1942-43.
1. Wheat (and wheat equivalent of flour) . . .	Bushel	101,000,000	15.78
2. Sultanas . . . . .	Ton	38,200	1.29
3. Lexias . . . . .	"	3,000	0.11
4. Currants . . . . .	"	13,400	0.36
5. Sugar (cane) . . . . .	"	305,000	3.22
6. Wool (as in the grease) . . . . .	lb.	975,000,000	46.60
7. Tallow . . . . .	Cwt.	600,000	0.67
8. Cattle hides . . . . .	lb.	28,000,000	0.74
9. Calfskins . . . . .	"	1,800,000	0.10
10. Beef (frozen) . . . . .	"	182,000,000	2.60
11. Lamb (frozen) . . . . .	"	138,000,000	3.03
12. Mutton (frozen) . . . . .	"	44,000,000	0.50
13. Pork (frozen) . . . . .	"	16,000,000	0.39
14. Butter . . . . .	Cwt.	2,140,000	11.34
15. Silver . . . . .	Oz.	7,300,000	0.65
	(standard)		
16. Copper . . . . .	Ton	3,600	0.16
17. Tin . . . . .	"	1,300	0.27
18. Zinc . . . . .	"	99,000	1.62
19. Lead . . . . .	"	208,500	3.30
20. Gold (production) . . . . .	Oz.	937,000	7.27
	(fine)		
			100.00

The relative importance of the several items in the whole index is roughly indicated in the last column, which shows in percentage form the "value aggregates" for 1942-43, i.e., the average prices for that year multiplied by the "quantity multipliers."

The monthly index-numbers of export prices for the period January, 1933, to December, 1943, are set out in the following table :—

### MONTHLY EXPORT PRICE INDEX : AUSTRALIA.

(Base : Average three years ended June, 1939 = 1,000.)

Month.	1933.	1934.	1935.	1936.	1937.	1938.	1939.	1940.	1941.	1942.	1943.
January ..	696	998	737	981	1,216	959	830	1,031	1,036	1,063	1,143
February ..	658	965	721	990	1,187	935	827	1,031	1,043	1,062	1,141
March ..	648	939	717	998	1,256	928	807	1,033	1,048	1,062	1,147
April ..	656	923	769	1,004	1,271	918	801	1,034	1,048	1,063	1,147
May ..	713	859	818	1,004	1,249	921	801	1,036	1,047	1,064	1,147
June ..	771	823	829	949	1,202	886	823	1,037	1,048	1,058	1,147
July ..	837	788	834	977	1,212	902	835	1,034	1,049	1,139	1,148
August ..	840	797	844	1,022	1,210	872	830	1,031	1,051	1,138	1,157
September ..	900	738	907	1,004	1,145	840	942	1,033	1,052	1,139	1,152
October ..	859	717	952	1,042	1,118	849	977	1,034	1,056	1,136	1,159
November ..	907	708	942	1,135	1,019	834	980	1,036	1,061	1,138	1,172
December ..	902	699	935	1,169	1,012	822	986	1,034	1,061	1,136	1,175
Average	783	830	834	1,023	1,173	888	872	1,033	1,050	1,100	1,153

4. **Monthly Index (Changing Weights).**—The second series of the new index-numbers is designed merely for comparisons with the corresponding month, or period of months, of the previous year. The same price quotations are used, but the "multipliers" are much more closely in accord with the actual experience of the periods in question.

For any given month, the procedure is to multiply the price of each commodity in that month, and its price in the corresponding month of the previous year, by the quantity exported during the given month. A comparison of the resulting aggregates gives one possible measure of the change in prices over the period; i.e., the change assuming that the proportions of the different kinds of exports whose prices are to be measured were the same as their proportions in the given month. Another possible measure is given by assuming that the proportions of the different kinds of exports in the given month had been the same as their proportions in the corresponding month of the previous year. Accordingly the first step in the procedure is repeated, substituting the quantities exported during the corresponding month of the previous year.

The index-numbers so obtained have been proved over a period of years to lie very close together. As it is convenient for practical reasons to have one single figure rather than two close alternatives the two index-numbers are multiplied together and the square root of the product extracted. This is taken to be the index-number for the month, the prices of the corresponding month of the previous year being taken as base.

The index-numbers for two or more months of one year, as compared with the corresponding period of the previous year, are computed in very much the same way. The process merely involves the cumulative addition of the aggregates computed for the individual months, and extraction of the index-numbers as explained above.



Index numbers computed on this basis are shown in the following table for the years 1941-42 and 1942-43 :—

**MONTHLY EXPORT PRICE INDEX (CHANGING WEIGHTS) : AUSTRALIA.**

(Base : Weighted Average Price Level in corresponding months of preceding year = 1,000.)

Month.	1941-42.		1942-43.	
	Month stated compared with same month of preceding year.	Period of trade year ending in month stated compared with same period of preceding year.	Month stated compared with same month of preceding year.	Period of trade year ending in month stated compared with same period of preceding year.
July .. .. .	1,021	1,021	1,090	1,090
August .. .. .	1,018	1,019	1,079	1,085
September .. .. .	1,019	1,019	1,080	1,083
October .. .. .	1,015	1,018	1,073	1,081
November .. .. .	1,022	1,019	1,068	1,078
December .. .. .	1,028	1,020	1,049	1,073
January .. .. .	1,022	1,021	1,068	1,072
February .. .. .	1,012	1,020	1,075	1,072
March .. .. .	1,006	1,018	1,105	1,076
April .. .. .	1,016	1,018	1,097	1,079
May .. .. .	1,018	1,018	1,086	1,080
June .. .. .	1,012	1,018	1,110	1,083

Monthly export price index-numbers are issued in regular press notices, and in the *Monthly Review of Business Statistics*.

**§ 14. External Trade of Australia and other Countries.**

1. **Essentials of Comparisons.**—Direct comparisons of the external trade of any two countries are possible only when the general conditions prevailing therein, and the system of record, are more or less identical. For example, in regard to the mere matter of record, it may be observed that in one country the value of imports may be the value at the port of shipment, while in another the cost of freight, insurance and charges may be added thereto. Again, the values of imports and exports in the one may be declared by merchants, whereas in the other they may be the official prices fixed from time to time by a commission constituted for the purpose. In later years, moreover, a very substantial difference in the value of imports would arise from the different methods of converting the moneys of foreign countries, i.e., from the application of current rates of exchange or of the mint par. Lastly, the figures relating to the external trade of any country are also affected in varying degree by the extent to which they include transit or re-export trade. This class of trade represents a much greater proportion of the trade of Switzerland and Belgium than that of other countries. France and the United Kingdom also re-export largely, whereas in Canada, Australia and New Zealand the same class of trade represents a comparatively small proportion of the total trade.

2. **"Special Trade" of Various Countries.**—Special trade may be defined according to the interpretation of the British Board of Trade, as (a) imports entered for consumption in the country (as distinguished from imports for transshipment or re-export), and (b) exports of domestic products.

In the following table the figures relate as nearly as possible to imports entered for consumption in the various countries specified, and to exports of their domestic products. It is to be noted, however, that these figures do not invariably denote the same thing throughout, since, in the United Kingdom and other manufacturing countries, raw or partly manufactured materials are imported as for home consumption, and, after undergoing some process of manufacture or further modification, are re-exported as domestic production. Nevertheless, a comparison of this character reveals approximately the extent of the external trade which otherwise would not be manifest. The latest figures relating to foreign countries have been extracted from the *Statistical Year Book of the League of Nations*.

**IMPORTS FOR HOME CONSUMPTION, AND EXPORTS OF DOMESTIC PRODUCTS  
(MERCHANDISE ONLY) : VARIOUS COUNTRIES, 1939.**

Country.	Trade.			Trade per Inhabitant.		
	Imports.	Exports.	Total.	Imports.	Exports.	Total.
	£'000,000 Stg.	£'000,000 Stg.	£'000,000 Stg.	£ s. d. Stg.	£ s. d. Stg.	£ s. d. Stg.
Australia (a) ..	115.7	118.8	234.5	16 10 8	16 19 6	33 10 2
United Kingdom	885.5	439.5	1,325.0	18 12 1	9 4 8	27 16 9
Canada ..	165.2	203.5	368.7	14 13 8	18 1 7	32 15 3
India ..	124.0	145.1	269.1	0 6 9	0 7 11	0 14 8
New Zealand ..	39.5	44.8	84.3	25 13 2	29 2 3	54 15 5
Union of South Africa ..	90.4	33.9	124.3	8 18 0	3 6 8	12 4 8
Argentina Re- public ..	93.7	110.0	203.7	7 4 7	8 9 8	15 14 3
Belgium ..	135.4	150.1	285.5	16 2 11	17 18 0	34 0 11
China ..	36.0	27.7	63.7	0 1 7	0 1 3	0 2 10
Munchuria ..	100.7	38.1	138.8	2 14 6	1 0 7	3 15 1
Denmark ..	87.1	78.7	165.8	22 19 4	20 15 2	43 14 6
France ..	195.2	143.0	338.2	4 13 0	3 8 2	8 1 2
Germany ..	287.4	298.2	585.6	3 12 7	3 15 4	7 7 11
Italy ..	73.0	71.5	144.5	1 13 7	1 12 11	3 6 6
Japan ..	173.9	213.4	387.3	2 7 10	2 18 8	5 6 6
Netherlands ..	182.0	115.9	297.9	20 17 1	13 5 9	34 2 10
Netherlands East Indies ..	57.0	93.0	150.0	0 16 8	1 7 2	2 3 10
Norway ..	68.1	40.4	108.5	23 6 2	13 16 8	37 2 10
Poland ..	29.6	30.4	60.0	0 16 10	0 17 4	1 14 2
Sweden ..	134.4	101.5	235.9	21 6 0	16 1 7	37 7 7
Switzerland ..	93.6	64.8	158.4	22 4 9	15 4 0	37 8 9
U.S.A. ..	465.5	639.2	1,104.7	3 11 5	4 18 1	8 9 6
U.S.S.R.(Russia)	56.9	53.3	110.2	0 6 8	0 6 3	0 12 11

(a) Year ended 30th June, 1940.

### § 15. Trade of the United Kingdom with Australia compared with that of Competing Countries.

**Proportion of Trade from United Kingdom and Competing Countries.**—The failure of the United Kingdom to maintain the position formerly held in the import trade of Australia has been a matter of more than ordinary interest for some years. Since 1908 permanent resident Commissioners appointed by the British Board of Trade have been located in Australia for the purpose of advising manufacturers and merchants in the United Kingdom with regard to Australian trade affairs. From 8th August, 1907, the Commonwealth Customs Tariffs have provided preferential rates of Customs Duties on certain goods the produce or manufacture of the United Kingdom with the object of assisting the British manufacturer to retain or improve his position in this market, in relation to other countries. The main provisions in these Acts relating to preference are dealt with on previous pages in this Chapter.

In an investigation into the relative position occupied by the United Kingdom in the import trade of Australia, the comparison must, of course, be restricted to those classes of goods which are produced or manufactured in the United Kingdom. The imports into Australia include many commodities, such as tea, rice, raw coffee, unmanufactured tobacco, petroleum products, copra, timber, etc., which the United Kingdom could not supply. These items, in addition to others not available from that country, have, therefore, been omitted from the computation following.

The imports into Australia have been classified under nine headings, and the trade of the United Kingdom therein is compared with that of France, Germany, Japan, and

the United States of America. These countries have been selected as the principal competitors with the United Kingdom for the trade of Australia under the specified headings. Totals for the five years 1913 and 1935-36 to 1938-39 are shown in the following table.

Particulars for subsequent years are not available for publication.

### AUSTRALIAN IMPORTS OF PRODUCTS OF VARIOUS COUNTRIES.

*British Currency Values.*

Nature of Imports.	Year.	United Kingdom.	France.	Germany.	Japan.	United States.	All Countries.
		£Stg.	£Stg.	£Stg.	£Stg.	£Stg.	£Stg.
Foodstuffs of animal origin	1913 ..	301,025	3,093	12,071	6,988	289,229	947,697
	1935-36	247,197	1,269	..	64,668	216,112	1,412,896
	1936-37	281,017	1,208	1,148	61,203	250,934	1,509,813
	1937-38	286,568	1,151	1,771	218,674	251,297	1,565,765
	1938-39	300,283	993	548	175,629	269,791	1,599,827
Spirituous and alcoholic liquors	1913 ..	1,227,561	343,394	143,426	1,689	2,805	1,947,248
	1935-36	602,630	49,706	2,098	..	1,670	696,103
	1936-37	537,072	53,024	2,268	82	286	633,133
	1937-38	625,655	52,800	3,436	82	917	727,220
	1938-39	613,374	58,642	4,320	157	1,180	719,967
Apparel, textiles, and manufactured fibres	1913 ..	12,254,561	961,025	1,712,395	475,973	623,542	19,935,750
	1935-36	9,470,308	258,601	489,483	3,223,969	280,505	17,292,354
	1936-37	11,074,231	248,517	523,529	2,358,656	119,571	18,059,604
	1937-38	12,288,251	336,375	607,471	3,204,718	187,856	21,016,945
	1938-39	10,033,422	411,056	503,713	2,545,081	281,766	17,756,098
Metals, metal manufactures, and machinery	1913 ..	13,905,483	217,148	2,380,152	7,657	3,817,705	21,670,212
	1935-36	13,550,189	30,267	1,943,439	286,280	6,848,650	25,206,103
	1936-37	16,142,408	42,731	1,345,057	248,435	6,061,105	27,277,464
	1937-38	21,174,615	63,465	1,636,328	187,350	9,360,634	37,380,008
	1938-39	18,246,658	53,404	1,449,405	167,570	6,886,329	31,274,421
Paper and stationery	1913 ..	1,789,577	21,930	266,483	10,656	403,679	3,134,750
	1935-36	3,052,273	52,786	208,138	78,785	292,268	5,295,820
	1936-37	3,042,380	57,158	234,769	82,581	318,543	5,933,131
	1937-38	3,367,801	51,847	262,435	142,464	390,223	6,609,609
	1938-39	2,945,640	51,572	316,741	88,448	372,572	6,185,576
Jewellery, time-pieces, and fancy goods	1913 ..	521,290	88,070	263,688	19,307	138,217	1,442,292
	1935-36	232,717	19,545	127,992	195,592	71,047	1,194,566
	1936-37	243,601	26,891	153,485	197,994	83,846	1,256,235
	1937-38	275,796	29,130	178,755	208,609	132,078	1,581,455
	1938-39	275,301	31,330	172,867	175,305	121,981	1,431,605
Earthenware, cements, glass, etc.	1913 ..	650,138	40,245	453,188	21,193	62,887	1,565,727
	1935-36	879,191	8,115	170,663	227,804	127,791	1,690,283
	1936-37	930,126	13,862	167,352	183,558	70,753	1,774,183
	1937-38	998,637	11,101	200,822	228,858	71,928	2,047,362
	1938-39	946,220	16,980	204,527	182,983	89,857	1,861,974
Drugs, chemicals, and fertilizers	1913 ..	1,020,647	245,426	304,179	139,178	210,758	2,721,902
	1935-36	1,902,253	215,782	352,333	175,803	622,350	4,370,127
	1936-37	1,880,665	208,572	490,370	130,362	567,083	4,515,446
	1937-38	2,056,472	203,987	498,487	136,677	786,052	5,304,092
	1938-39	2,288,587	196,220	476,737	47,651	1,003,679	5,598,553
Rubber and leather and manufactures thereof, and substitutes therefor	1913 ..	485,216	68,686	347,045	688	433,837	1,717,035
	1935-36	218,850	5,924	28,082	40,250	98,325	1,185,812
	1936-37	241,252	5,200	35,409	42,193	83,039	1,831,914
	1937-38	253,378	4,674	29,398	50,165	121,323	1,915,442
	1938-39	247,671	4,979	47,374	38,215	114,235	1,689,598
Total, above-mentioned imports	1913 ..	32,155,498	1,989,017	5,882,627	683,629	5,982,659	55,082,613
	1935-36	30,162,108	611,095	2,422,228	4,203,151	8,558,718	58,344,586
	1936-37	34,373,352	657,163	2,953,387	3,305,064	7,564,163	62,790,923
	1937-38	41,327,173	754,530	3,418,903	4,377,597	11,302,308	78,047,898
	1938-39	35,897,456	825,176	3,176,232	3,421,039	9,141,360	68,117,619
Total imports (less bullion and specie)	1913 ..	40,948,803	2,222,631	7,029,325	950,300	10,907,512	78,196,109
	1935-36	33,835,898	700,108	2,903,049	4,960,571	13,011,326	83,518,869
	1936-37	38,559,366	865,919	3,596,584	4,004,465	12,959,149	90,591,580
	1937-38	46,226,172	964,554	4,170,624	5,349,086	17,758,684	111,733,254
	1938-39	40,419,283	1,028,133	4,131,212	4,093,191	14,647,305	99,313,150



Stated as percentages the figures in the preceding table are shown below.

Particulars for subsequent years are not available for publication.

**AUSTRALIAN IMPORTS OF PRODUCTS OF VARIOUS COUNTRIES : PERCENTAGES.**

Nature of Imports.	Year.	United Kingdom.	France.	Germany.	Japan.	United States.	All Countries.
		%	%	%	%	%	%
Foodstuffs of animal origin	1913 ..	31.77	0.33	1.27	0.74	30.52	100
	1935-36	17.50	0.09	0.00	4.58	15.30	100
	1936-37	18.61	0.08	0.08	4.05	16.62	100
	1937-38	18.30	0.07	0.11	13.97	16.05	100
	1938-39	18.77	0.06	0.03	10.98	16.86	100
Spirituous and alcoholic liquors	1913 ..	63.04	17.64	7.37	0.09	0.14	100
	1935-36	86.57	7.14	0.30	0.00	0.24	100
	1936-37	81.92	8.37	0.36	0.01	0.05	100
	1937-38	86.03	7.26	0.47	0.00	0.13	100
	1938-39	85.26	8.15	0.60	0.02	0.16	100
Apparel, textiles, and manufactured fibres	1913 ..	61.48	4.82	8.59	2.39	3.13	100
	1935-36	54.80	1.50	2.83	18.64	1.62	100
	1936-37	61.32	1.37	2.89	13.06	0.66	100
	1937-38	58.47	1.60	2.89	15.25	0.89	100
	1938-39	56.51	2.32	2.84	14.33	1.59	100
Metals, metal manufactures, and machinery	1913 ..	64.17	1.00	10.98	0.04	17.62	100
	1935-36	53.76	0.12	4.14	1.14	27.17	100
	1936-37	59.17	0.16	4.93	0.91	22.22	100
	1937-38	56.80	0.17	4.39	0.50	25.11	100
	1938-39	52.51	0.15	4.17	0.48	19.82	100
Paper and stationery	1913 ..	57.41	0.70	8.50	0.34	12.88	100
	1935-36	57.64	1.00	3.93	1.49	5.52	100
	1936-37	51.27	0.96	3.95	1.39	5.36	100
	1937-38	50.95	0.78	3.97	2.16	5.90	100
	1938-39	47.62	0.83	5.12	1.43	6.02	100
Jewellery, time-pieces, and fancy goods	1913 ..	36.14	6.11	18.28	1.34	9.58	100
	1935-36	19.48	1.64	10.71	16.37	5.95	100
	1936-37	19.39	2.14	12.21	15.76	6.67	100
	1937-38	17.44	1.84	11.30	13.19	8.35	100
	1938-39	19.23	2.19	12.07	12.25	8.52	100
Earthenware, cements, glass, etc.	1913 ..	41.52	2.57	28.94	1.37	4.02	100
	1935-36	52.01	0.48	10.01	13.48	7.56	100
	1936-37	52.42	0.78	9.43	10.34	4.49	100
	1937-38	48.78	0.54	9.81	11.18	3.51	100
	1938-39	50.82	0.91	10.98	9.83	4.83	100
Drugs, chemicals, and fertilizers	1913 ..	37.49	9.02	11.18	5.11	7.74	100
	1935-36	43.53	4.94	8.06	4.02	14.24	100
	1936-37	41.64	4.61	10.85	2.88	12.55	100
	1937-38	38.77	3.85	9.40	2.58	14.82	100
	1938-39	40.87	3.50	8.52	0.85	17.93	100
Rubber and leather and manufactures thereof, and substitutes therefor	1913 ..	28.26	4.00	20.21	0.04	25.27	100
	1935-36	18.46	0.50	2.37	3.39	8.29	100
	1936-37	13.16	0.28	1.93	2.30	4.53	100
	1937-38	13.23	0.24	1.53	2.62	6.33	100
	1938-39	14.66	0.29	2.80	2.26	6.76	100
Total, above-mentioned articles	1913 ..	58.38	3.61	10.68	1.24	10.86	100
	1935-36	51.70	1.10	4.15	7.36	14.67	100
	1936-37	54.74	1.04	4.70	5.26	12.04	100
	1937-38	52.95	0.97	4.38	5.61	14.48	100
	1938-39	52.70	1.21	4.66	5.02	13.42	100
Total imports (less bullion and specie)	1913 ..	52.37	2.84	8.99	1.22	13.95	100
	1935-36	40.51	0.95	3.55	5.95	16.64	100
	1936-37	42.56	0.95	3.97	4.42	14.30	100
	1937-38	41.37	0.86	3.73	4.79	15.80	100
	1938-39	40.70	1.04	4.16	4.12	14.75	100

The total value of the commodities included in the competitive classes increased from £55,082,613 during 1913 to £122,631,560 during 1926-27, but declined during the economic depression to £29,576,008 in 1931-32. Subsequently the total value rose to £78,047,898 in 1937-38 only to fall away again in 1938-39 to £68,117,619. The principal classes of competitive imports are (a) metals, metal manufactures and machinery (value £31,274,421 in 1938-39) and (b) apparel, textiles and manufactured fibres (value £17,756,098 in 1938-39). The value of goods included in these two groups represented 72 per cent. of the total value of competitive commodities during 1938-39.

In 1938-39 the United Kingdom supplied 52.70 per cent. of the total value of competitive goods. In 1913 the corresponding figure was 58.38 per cent. and in 1937-38 52.95 per cent. In four of the nine competitive groups of imports, the proportion supplied by the United Kingdom declined during 1938-39 as compared with the previous year. In the five groups—foodstuffs of animal origin; jewellery, timepieces and fancy goods; earthenware, cement, glass, etc.; drugs, chemicals and fertilizers; rubber and leather and manufactures thereof, etc.—which showed gains, the share of the total purchases supplied by the United Kingdom, was 18.77 per cent., 19.23 per cent., 50.82 per cent., 40.87 per cent., and 14.66 per cent. respectively.

The share of Japan in the competitive trade increased in proportion to other countries from 1.24 per cent. in 1913 to 8.11 per cent. in 1934-35, but declined appreciably during the next three years to 5.02 per cent. in 1938-39. The most important classes of competitive goods imported from Japan are silk piece goods, cotton and linen piece goods, yarns, crockery, fancy goods and sulphur. The total value of imports from Japan in the competitive groups during 1938-39 was £3,421,039, and of this total silk piece goods valued at £1,160,761 represented 34 per cent., and cotton and linen piece goods valued at £726,050 represented 21 per cent., or together 55 per cent. of the total competitive goods imported from Japan.

The position of the United States of America in the competitive trade improved from 10.86 per cent. in 1913 to 23.52 per cent. in 1928-29; after 1929-30 it declined progressively to 8.17 per cent. in 1932-33, but recovered somewhat in recent years and in 1938-39 represented 13.42 per cent. of the total. Of the total competitive trade from this country approximately 75 per cent. was represented by metals, metal manufactures and machinery.

The position of France declined from 3.61 per cent. in 1913 to 1.21 per cent. in 1938-39. Apparel, textiles, and drugs, chemicals and fertilizers are the most important imports from France.

The proportion of the imports supplied by Germany was 10.68 per cent. in 1913, 0.86 per cent. in 1923-24, and 4.66 per cent. in 1938-39. The principal classes of imports from Germany are manufactured metals and machinery, apparel and textiles, and drugs and chemicals.

### § 16. Oversea Trade in Calendar Years.

For the purpose of comparison with countries which record oversea trade in calendar years the following table has been compiled to show Australian imports and exports, Merchandise only, for each quarter and of the calendar years 1939 to 1942:—

#### OVERSEA TRADE (MERCHANDISE ONLY) IN CALENDAR YEARS: AUSTRALIA.

Year.					Imports £ Stg.'000.	Exports.	
						Australian Currency £A'000.	British Currency £ Stg'000.
QUARTER ENDED MARCH.							
1939 ..	..	..	..	..	25,097	30,905	24,674
1940 ..	..	..	..	..	35,009	41,902	33,455
1941 ..	..	..	..	..	23,520	33,335	26,615
1942(a)	..	..	..	..	27,177	35,632	28,449
QUARTER ENDED JUNE.							
1939 ..	..	..	..	..	23,521	26,308	21,005
1940 ..	..	..	..	..	33,378	40,332	32,201
1941 ..	..	..	..	..	27,554	34,108	27,232
1942(a)	..	..	..	..	37,194	43,259	34,538

(a) Incomplete, excludes Governmental imports and exports referred to in Notes (g) and (h) on page 408.

OVERSEA TRADE (MERCHANDISE ONLY) IN CALENDAR YEARS:  
AUSTRALIA—*continued.*

Year.	Imports £ Stg'000.	Exports.	
		Australian Currency £A'000.	British Currency £ Stg'000.
QUARTER ENDED SEPTEMBER.			
1939 .. .. .	24,884	24,597	19,638
1940 .. .. .	30,294	32,578	26,010
1941(a) .. .. .	35,337	33,603	26,828
1942 .. .. .	46,388	27,943	22,310
QUARTER ENDED DECEMBER.			
1939 .. .. .	22,404	41,919	33,468
1940 .. .. .	27,282	34,717	27,718
1941(a) .. .. .	33,554	34,190	27,297
1942 .. .. .	51,497	29,026	23,174
TOTAL FOR YEAR.			
1939 .. .. .	95,906	123,729	98,785
1940 .. .. .	125,963	149,529	119,384
1941(a) .. .. .	119,965	135,236	107,972
1942(a) .. .. .	162,256	135,860	108,471

(a) Incomplete, excludes Governmental imports and exports referred to in Notes (g) and (h) on page 408.

### § 17. Excise.

Although excise goods have no immediate bearing on overseas trade the rates of excise duty are in some cases related to the import duty on similar goods. Moreover as the Excise Acts are administered by the Department of Trade and Customs it is convenient to publish here the quantities of Australian produce on which excise duty has been paid. Particulars of Customs and Excise Revenue are shown in Chapter XVII. "Public Finance".

#### QUANTITIES OF SPIRITS, BEER, TOBACCO, ETC., ON WHICH EXCISE DUTY WAS PAID : AUSTRALIA.

Article.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	Proof gal.	Proof gal.	Proof gal.	Proof gal.	Proof gal.
Spirits—					
Brandy .. .. .	193,923	198,583	226,990	222,595	219,391
Gin .. .. .	282,349	269,118	297,409	279,394	278,693
Whisky .. .. .	158,515	157,705	199,157	234,642	264,196
Rum .. .. .	326,249	347,648	418,073	370,738	339,045
Liqueurs .. .. .	5,591	5,705	8,046	13,463	15,872
Spirits, n.e.i. .. .. .	415	170	481	247	203
Spirits for Industrial or Scientific Purposes .. .. .	112,594	114,129	124,707	126,118	149,661
Spirits for Fortifying Wine .. .. .	786,836	770,997	867,308	1,009,173	1,187,167
Spirits for making Vinegar .. .. .	15,496	17,965	18,640	19,810	26,234
Amylic Alcohol and Fusel Oil .. .. .	27	23	28	50	27
Methylated Spirit .. .. .	..	..	..	..	2,010,613
Total, Spirits .. .. .	1,881,995	1,882,043	2,160,839	2,276,230	4,491,102



QUANTITIES OF SPIRITS, BEER, TOBACCO, ETC., ON WHICH EXCISE DUTY  
WAS PAID: AUSTRALIA—*continued.*

Article.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	liq. gal.	liq. gal.	liq. gal.	liq. gal.	liq. gal.
Spirits for the manufacture of Essences, Scents, etc.	(a) 45,541	..	..	..	..
	proof gal.	proof gal.	proof gal.	proof gal.	proof gal.
Spirits for the manufacture of Essences .. ..	(b) 17,328	57,376	71,674	72,146	79,641
Spirits for the Manufacture of Scents, etc. .. ..	(b) 13,452	47,778	55,984	60,819	71,504
	gal.	gal.	gal.	gal.	gal.
Beer .. ..	79,246,025	83,904,645	89,973,476	96,078,168	98,125,882
	lb.	lb.	lb.	lb.	lb.
Tobacco — Manufactured, n.e.i. .. ..	15,462,073	15,734,675	15,998,628	15,354,854	16,815,279
Tobacco—Hand-made ..	47,418	41,774	21,206	14,892	7,874
Tobacco—Unmanufactured, etc. .. ..	887,264	5,604,256	4,226,656	4,880,818	5,527,032
Total, Tobacco ..	16,396,755	21,380,705	20,246,490	20,250,564	22,350,185
	lb.	lb.	lb.	lb.	lb.
Cigars—Machine-made ..	63,613	71,051	57,368	73,929	77,454
Cigars—Hand-made ..	204,475	187,450	167,362	152,975	181,561
Total, Cigars ..	268,088	258,501	224,730	226,904	259,015
	lb.	lb.	lb.	lb.	lb.
Cigarettes—Machine-made ..	6,203,852	6,891,144	7,148,051	6,901,954	7,886,965
Cigarettes—Hand-made ..	272	114	2	..	..
Total, Cigarettes ..	6,204,124	6,891,258	7,148,053	6,901,954	7,886,965
	60 papers or tubes.	60 papers or tubes.	60 papers or tubes.	60 papers or tubes.	60 papers or tubes.
Cigarette Tubes and Papers	90,046,428	101,977,824	104,986,390	107,716,324	112,019,581
	gross of boxes.	gross of boxes.	gross of boxes.	gross of boxes.	gross of boxes.
Matches .. ..	3,260,806	3,278,759	3,678,885	3,551,598	3,201,516
	gal.	gal.	gal.	gal.	gal.
Petrol .. ..	31,978,588	27,878,912	36,556,755	48,428,451	36,537,649
	doz. packs.	doz. packs.	doz. packs.	doz. packs.	doz. packs.
Playing Cards .. ..	109,907	117,412	142,776	134,555	124,912
	..	..	..	..	lb.
Carbonic Acid Gas ..	..	..	..	..	6,481,334
Dry Batteries and Cells ..	..	..	..	..	2,665,157

(a) To 31st December, 1937.

(b) From 1st January, 1938.

### § 18. Interstate Trade.

Prior to the federation of the Australian Colonies (now States), each Colony published statistics of its trade with the other Colonies. A similar record was continued by the Commonwealth Government under the provisions of the Constitution Act (Section 93). On the expiry of the "book-keeping" period, these records were discontinued as from 13th September, 1910, and the latest published statements were for the year 1909. Later the Governments of Western Australia and Tasmania revived the records, and statistics of the subject are available again for those States.

At the Conference of Statisticians held in January, 1928, it was resolved that efforts should be made in other States to record the interstate movement of certain principal commodities.

The Government Statist for South Australia publishes some figures for that State made up from the records of Western Australia and Tasmania, and from various other sources. Since February, 1940, statistics in some detail have been collected by the Government Statistician of Queensland. The statistics of interstate trade for New South Wales and Victoria are very meagre. The Melbourne Harbour Trust publishes, in its annual report, the quantities of various commodities of interstate trade loaded and discharged in the Port of Melbourne. The trade with individual States is not disclosed.

## CHAPTER XV.—LABOUR, WAGES AND PRICES.

## A.—RETAIL PRICES AND PRICE INDEXES.

## § 1. Collection of Returns of Retail Prices and Rents.

The retail prices of an extensive range of articles and services in common demand are collected by the Bureau at frequent intervals from representative retail establishments in the more important towns throughout Australia. The prices of a less extensive range of commodities were also collected at annual intervals, up to November, 1942, from approximately 200 towns throughout Australia.

Definite standards of quality have been established for each article in order to ensure that, as far as care and effort can make it possible, prices for articles of identical grade or quality will be recorded at all times and for all places. These standards, which are incorporated in printed "specifications", are closely watched and revised from time to time to keep them in harmony with changing trade practices and conditions.

The actual collection of the data is carried out, under the direct supervision of the State Statisticians, by specially qualified field officers, while two supervising field officers are provided to assist in the co-ordination of activities in the several States. The prices are obtained, where practicable, from about ten retailers in each of the capital cities, and from about five retailers in the provincial towns. Retailers and house-agents are carefully selected in order to ensure the supply of representative figures for the whole of each town, and returns are carefully verified if there should be any doubt as to the accuracy of the information supplied.

Price data is collected monthly in respect of food and groceries, and quarterly for all other items of the regimen.

Reference may be made to pages 1 to 13 of Labour Report No. 32, for 1941 and 1942, for some comments on the effects of war-time and other abnormal conditions on retail price index numbers.

## § 2. Compilation of Indexes of Retail Prices and Rents.

1. **General.**—The methods adopted for the compilation of indexes of retail prices and rents are very briefly described below. For a more detailed explanation, and an analysis of the problems involved, the reader should refer to *Labour Report* No. 31 and the Appendix to *Labour Report* No. 9.

2. **The Regimen.**—The "regimen" on which the retail price indexes are compiled consists of a list of those commodities and services which commonly enter into the consumption of the average household. For reasons of accuracy and practical convenience the list is confined to articles for which price data can be obtained with due precision throughout the year in the principal towns of Australia. The regimen is divided into the following groups and sections:—

RETAIL PRICES	
Group.	Section.
I. Food and Groceries ..	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">{</div> <div style="display: inline-block; vertical-align: middle;">A.—Groceries. B.—Dairy Produce. C.—Meat.</div> </div>
II. Housing .. ..	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">{</div> <div style="display: inline-block; vertical-align: middle;">D.—House Rent. E.—Clothing—Man. F.—Clothing—Woman.</div> </div>
III. Clothing .. ..	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">{</div> <div style="display: inline-block; vertical-align: middle;">G.—Clothing—Boy (10½ years). H.—Clothing—Girl (7 years). J.—Clothing—Boy (3½ years). K.—Household Drapery.</div> </div>
IV. Miscellaneous ..	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">{</div> <div style="display: inline-block; vertical-align: middle;">L.—Household Utensils. M.—Fuel and Light. N.—Other Miscellaneous.</div> </div>

An index (the "All Items" or "C" series) is compiled for the whole of the foregoing groups, but for many purposes indexes are also compiled for each group or section separately.



A list of the articles and services included in the various sections is published in the *Labour Reports*.

3. **The Mass Units.**—In the case of food and groceries the mass units are approximately the annual average consumption per head for household purposes of the various articles during the years 1927 to 1929. In the case of housing the mass unit is the multiplier applied to the weekly rental to raise it to an annual basis. In the case of Sections E to J the mass units represent the estimated annual consumption per head of the articles included in these sections. In the case of Sections K to M the mass units represent the estimated consumption per household while in Section N are shown the actual amounts necessary to cover the estimated cost of the services included for an average household. The "mass units" used as weights or multipliers remain the same as they were in pre-war years without any adjustment for rationing or scarcity of goods. The indexes therefore measure price changes on the basis of pre-war standards of consumption.

It will be noted that the mass units are all shown on the basis of consumption per head or per household. In the tabulation for index-number purposes, the figures are raised to a "total population" basis, by multiplying the aggregate cost of each group or section by the numbers of the population properly applicable to it. Thus food and groceries is multiplied by the whole population; housing by the total number of households; the clothing sections by the proportions of the population applicable to each; and the Sections K to N (miscellaneous) by the total number of households.

4. **Relative Importance of the Groups and Sections.**—The relative importance of the groups and sections in the All Items ("C" series) index for Melbourne for the December quarter of 1942 was as follows:—

Group.	Section.	Percentage of Total Aggregate Cost.
I. Food and Groceries .. ..	A.—Groceries .. ..	13.13
	B.—Dairy Produce .. ..	9.53
	C.—Meat .. ..	10.57
II. Housing .. ..	D.—House Rent (4 and 5 rooms) ..	21.91
	E.—Man .. ..	9.78
III. Clothing .. ..	F.—Woman .. ..	11.58
	G.—Boy, 10½ years .. ..	1.95
	H.—Girl, 7 years .. ..	1.28
	J.—Boy, 3½ years .. ..	0.77
	K.—Household Drapery .. ..	1.82
IV. Miscellaneous .. ..	L.—Household Utensils .. ..	0.58
	M.—Fuel and Light .. ..	4.71
	N.—Other Miscellaneous .. ..	12.39
		100.00

5. **Base Periods of the Indexes.**—The base period of the index is usually selected as a year or period from which it is informative (for current purposes) to begin comparisons. The index for the selected year or base period is 1,000. From time to time it is convenient to change the base period. Thus from 1911 to 1922 the base period of the index then compiled was the year 1911. When the All Items ("C" Series) index was first compiled in 1922 the month of November, 1914, was adopted as base as representing the level prevailing at the outbreak of war. As from 1st January, 1930, the average of the five years 1923–27 was adopted as base period. This remains in general use but for purposes of showing war-time changes the index is also published on the base of the average of the three years ended June, 1939, in the *Monthly Review of Business Statistics*.

6. **The Methods of Tabulation.**—The prices (converted to pence) received from retailers for each item of the regimen are added together and divided by the number of individual prices. These averages are then multiplied by their respective mass units. The sum of these products for each section or group of the regimen is then multiplied by the population factor applicable to such section or group. The aggregate so produced

for any section, group or combination thereof for the period taken as the base of the indexes is regarded as equal to 1,000. The index-number for any other period is then calculated by applying to 1,000 the ratio which the aggregate for such period bears to the base aggregate.

### § 3. The Food, Groceries and Rent ("B" Series) Index of Retail Prices.

1. **General.**—This index measures the prices of food and groceries and the rent of 4 and 5-roomed houses. It was first compiled in respect of the year 1925, and index-numbers were retrospectively computed for the several earlier years shown below. It was designed to replace the "A" series index (food, groceries and rent of all houses), which was the original index first compiled by the Bureau in 1912. Owing, however, to the continued use of the latter index by Industrial Tribunals for the purpose of adjusting wages to variations in retail prices, the "B" series index never replaced the "A" series in this connexion.

2. **Retail Price Index-Numbers : Capital Cities, 1907 to 1942.**—Index-numbers computed separately for each group of the regimen, and the weighted average for both groups together, for the capital city of each State are shown in the next table.

#### RETAIL PRICE INDEX-NUMBERS : CAPITAL CITIES ("B" SERIES).

(Base of each Section : Weighted Average of Six Capital Cities, 1923-27 = 1,000.)

City.	1907.	1911.	1914.	1921.	1938.	1939.	1940.	1941.	1942.
FOOD AND GROCERIES.									
Sydney .. ..	523	553	646	1,062	904	936	952	962	1,040
Melbourne .. ..	517	523	610	1,063	884	942	947	943	1,042
Brisbane .. ..	530	569	603	1,014	838	864	889	911	972
Adelaide .. ..	532	570	679	1,066	861	897	900	905	1,012
Perth .. ..	670	753	728	1,116	899	938	949	981	1,029
Hobart .. ..	565	592	678	1,133	880	923	944	970	1,017
Weighted Average (a) ..	533	559	640	1,064	886	927	939	947	1,031
HOUSING (4 AND 5 ROOMS).									
Sydney .. ..	593	701	760	989	1,004	1,035	1,042	1,043	1,043
Melbourne .. ..	455	569	628	820	935	955	969	975	975
Brisbane .. ..	283	373	466	630	841	854	857	860	862
Adelaide .. ..	510	706	655	809	868	888	892	893	893
Perth .. ..	458	524	589	739	872	881	882	883	885
Hobart .. ..	405	452	518	881	913	925	933	933	933
Weighted Average (a) ..	497	612	662	862	942	965	973	976	976
FOOD, GROCERIES AND HOUSING.									
Sydney .. ..	548	606	687	1,036	941	972	985	992	1,039
Melbourne .. ..	495	539	616	977	902	945	953	953	1,014
Brisbane .. ..	442	500	554	877	838	858	875	889	927
Adelaide .. ..	524	618	671	975	862	891	895	899	963
Perth .. ..	594	672	679	982	887	914	921	941	971
Hobart .. ..	508	542	621	1,044	891	922	938	953	1,000
Weighted Average (a) ..	520	578	648	992	906	939	950	956	1,007

(a) For six Capital Cities.

### § 4. The All Items ("C" Series) Index of Retail Prices.

1. **General.**—This index measures the prices of food and groceries, rent of 4 and 5-roomed houses, clothing and miscellaneous household requirements, and for convenience of reference has been designated the "All Items" ("C" series) index. It has become more important in recent years because of its adoption by the Commonwealth Arbitration Court from 1st May, 1934, for the adjustment of wages controlled by that Court. It is used at present as the basis of the "Court" series of index-numbers adopted from July, 1937, by the same Court.

The compilation of this series was undertaken by the Bureau following a recommendation of the Royal Commission on the Basic Wage, which reported in 1920 and 1921. The Commission itself had collected data on prices in the capital cities for the month of November, 1914 to 1920 inclusive. In consequence, the Bureau commenced its own more comprehensive inquiries in five principal towns of each State, as from November, 1921, and continued them at quarterly intervals thereafter.

2. **Retail Price Index-Numbers : Thirty Towns, November, 1921 to June Quarter 1943.**—The following tables give index-numbers representing the variations in the prices in 30 of the more important towns, of food and groceries, housing, clothing, and miscellaneous household requirements combined.

**RETAIL PRICE INDEX-NUMBERS : THIRTY TOWNS ("C" SERIES). ALL ITEMS OF HOUSEHOLD CONSUMPTION.**

(Base : *Weighted Average of Six Capital Cities, 1923-27 = 1,000.*)

State and Town.	Nov- em- ber, 1921.	Year 1929.	Year 1936.	Year 1937.	Year 1938.	Year 1939.	Year 1940.	Year 1941.	Year 1942.	1943.	
										Mar. Qtr.	June Qtr.
NEW SOUTH WALES—											
Sydney ..	1,046	1,073	866	889	913	936	974	1,028	1,107	1,141	1,165
Newcastle ..	1,041	1,028	853	849	877	901	945	997	1,069	1,101	1,126
Broken Hill ..	975	1,018	818	893	940	955	981	1,049	1,132	1,118	1,185
Goulburn ..	1,033	1,108	864	867	893	916	949	1,005	1,087	1,116	1,140
Bathurst ..	947	979	833	842	860	883	923	974	1,050	1,080	1,107
Weighted Average, 5 Towns ..	1,042	1,067	865	886	911	933	972	1,026	1,104	1,137	1,162
VICTORIA—											
Melbourne ..	1,003	1,017	844	868	896	924	964	1,008	1,100	1,136	1,153
Ballarat ..	992	957	826	839	850	874	906	950	1,037	1,074	1,099
Bendigo ..	1,002	969	821	840	854	875	920	963	1,054	1,088	1,104
Geelong ..	1,019	980	848	855	884	911	941	984	1,065	1,099	1,125
Warrnambool ..	1,034	960	851	856	892	918	954	998	1,078	1,121	1,141
Weighted Average, 5 Towns ..	1,003	1,011	843	866	893	920	960	1,004	1,095	1,131	1,149
QUEENSLAND—											
Brisbane ..	923	923	804	837	852	870	908	963	1,033	1,063	1,083
Toowoomba ..	949	916	802	840	843	858	898	951	1,033	1,068	1,089
Rockhampton ..	972	904	802	840	853	867	905	959	1,032	1,059	1,086
Townsville ..	1,025a	939a	810a	883	902	918	950	1,004	1,075	1,103	1,124
Bundaberg ..	994b	931b	779b	809	831	847	879	938	1,015	1,047	1,068
Weighted Average, 5 Towns ..	941	922	803	840	854	871	909	964	1,035	1,066	1,086
SOUTH AUSTRALIA—											
Adelaide ..	989	1,037	839	859	888	906	936	988	1,075	1,093	1,111
Kadina, etc ..	998	943	765	769	786	810	833	882	962	983	1,008
Port Pirie ..	1,025	980	813	844	868	896	919	976	1,057	1,079	1,097
Mount Gambier ..	1,029	963	818	830	849	872	894	946	1,024	1,051	1,069
Peterborough ..	948	1,043	843	851	868	897	924	974	1,053	1,078	1,097
Weighted Average, 5 Towns ..	992	1,030	835	855	883	902	931	983	1,069	1,088	1,106
WESTERN AUSTRALIA—											
Perth, etc ..	1,008	1,026	856	869	882	901	932	993	1,061	1,092	1,115
Kalgoorlie, etc. ..	1,048	1,032	1,027	1,030	1,048	1,066	1,099	1,165	1,175	1,178	1,202
Northam ..	1,030	1,022	860	890	900	915	947	1,017	1,079	1,098	1,122
Bunbury ..	1,045	978	880	897	914	936	962	1,018	1,065	1,091	1,112
Geraldton ..	1,056	1,051	933	970	957	965	990	1,055	1,114	1,138	1,171
Weighted Average, 5 Towns ..	1,020	1,026	870	884	897	915	946	1,008	1,070	1,099	1,123
TASMANIA—											
Hobart ..	1,070	1,000	860	875	887	908	945	1,001	1,078	1,108	1,118
Launceston ..	1,067	967	840	856	872	888	926	974	1,040	1,069	1,081
Burnie ..	1,003	966	814	854	865	879	917	971	1,035	1,073	1,095
Devonport ..	904	948	809	833	848	861	896	951	1,012	1,048	1,060
Queenstown ..	1,031	972	850	857	875	903	936	987	1,045	1,086	1,098
Weighted Average, 5 Towns ..	1,057	986	850	866	879	898	936	989	1,060	1,091	1,103
Weighted Average, 30 Towns ..	1,013	1,026	848	871	894	917	954	1,006	1,087	1,119	1,140
Weighted Average, 6 Capital Cities ..	1,013	1,033	850	873	897	920	957	1,008	1,091	1,123	1,143

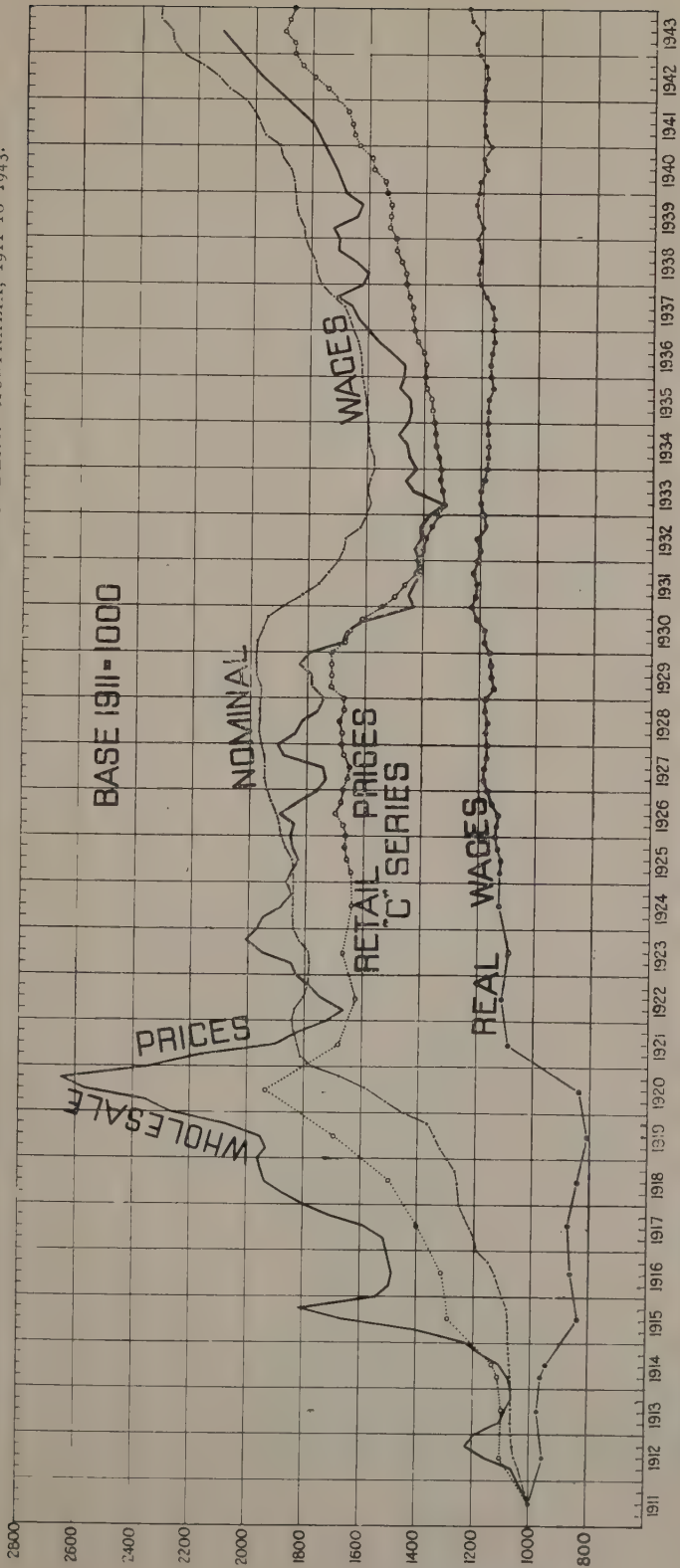
(a) Charters Towers.

(b) Warwick.

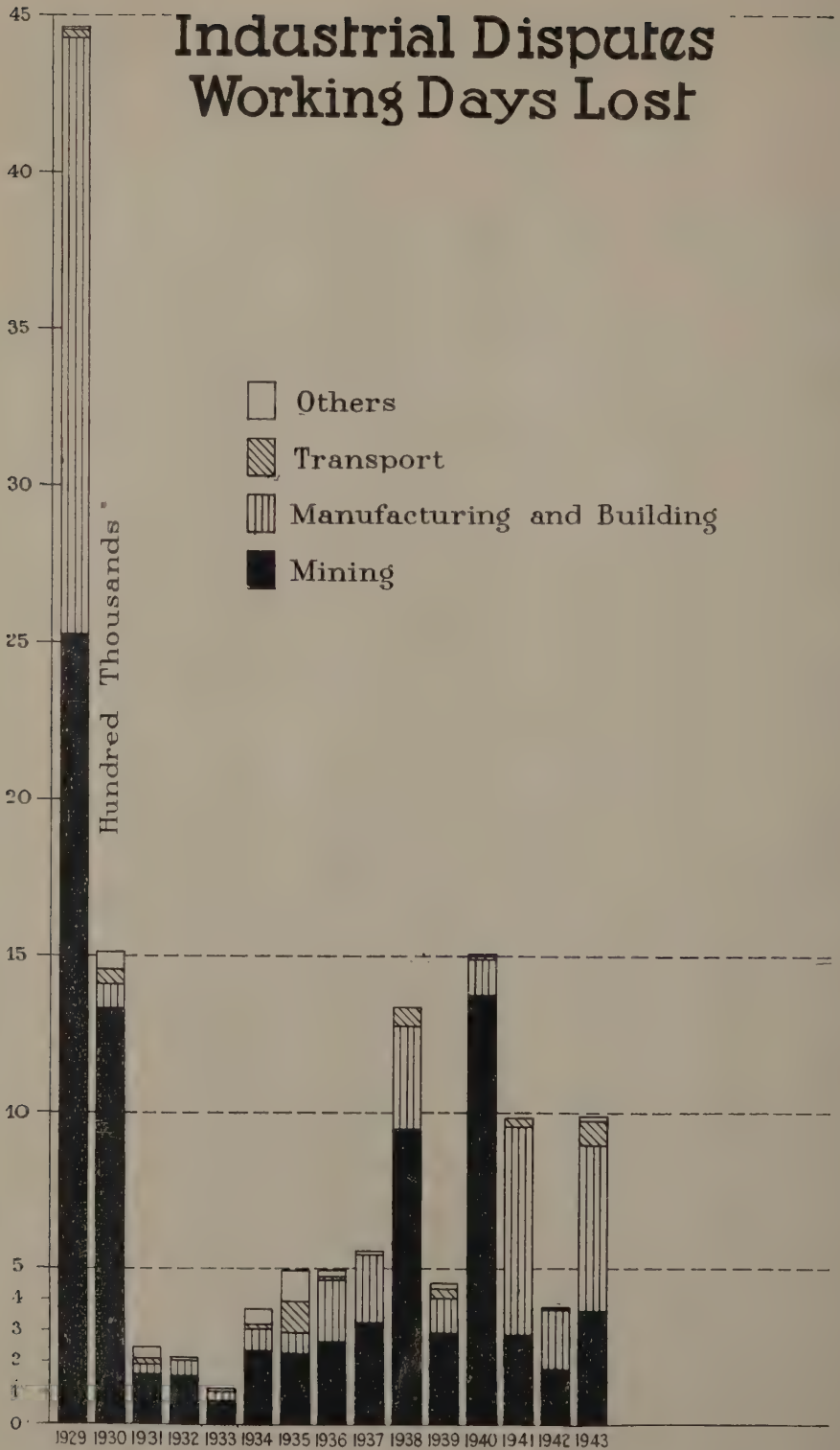
3. **Retail Price Index-Numbers : Capital Cities, 1914 to 1920.**—The next table gives index-numbers representing the variations in the prices, in each capital city, of all items of household consumption combined. The index-numbers for the clothing and miscellaneous groups were compiled from data collected by the Royal Commission on the Basic Wage.



WHOLESALE AND RETAIL PRICES, NOMINAL AND EFFECTIVE OR REAL WAGE INDEX-NUMBERS.—AUSTRALIA, 1911 TO 1943.



EXPLANATION.—The index-numbers in the above graph are for the Six Capital Cities as a whole, with the exception of these for Wholesale Prices, which are for Melbourne. They are all calculated to the common base 1911 = 1,000, the scale for which appears on the left of the graph. They are shown *quarterly* from 1912 to 1939, and thereafter the annual average in the case of the Wholesale Prices (Melbourne). The "C" Series Retail Prices (food, groceries, rent of 4 and 5 rooms, clothing and miscellaneous household expenditure) are shown *quarterly* from 1925. For the period 1911-1914 the "C" Series are taken back from the true base (November, 1914 = 1,000) by means of the "A" Series Index (Food and Rent of All Houses). Nominal Wages are shown *quarterly* from 1914, and Real Wages *quarterly* from 1925. Real Wages are computed on the basis of the "C" Series.



EXPLANATION.—The scale refers to working days lost in hundred thousands. Thus, taking the year 1929, and comparing the sections with the scale, it will be seen that about 2,528,000 working days were lost in Mining, 1,901,000 in Manufacturing and Building, 30,000 in Transport, and about 3,000 in other industries. Total, 4,462,000 days.

## RETAIL PRICE INDEX-NUMBERS : CAPITAL CITIES ("C" SERIES). ALL ITEMS OF HOUSEHOLD CONSUMPTION, 1914 TO 1920.

*(Base of each Group : Weighted Average of Six Capital Cities, 1923-27 = 1,000.)*

Period.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Six Capitals.
FOOD AND GROCERIES.							
Nov. 1914 ..	638	616	614	683	746	687	641
" 1915 ..	844	835	860	858	819	858	842
" 1916 ..	833	791	748	835	854	807	812
" 1917 ..	877	798	825	805	828	949	836
" 1918 ..	877	843	882	862	816	918	861
" 1919 ..	1,073	975	1,069	1,012	987	1,041	1,026
" 1920 ..	1,225	1,220	1,117	1,225	1,113	1,293	1,209

HOUSING (4 AND 5 ROOMS).							
Nov. 1914 ..	758	608	463	611	586	525	649
" 1915 ..	780	611	472	574	581	571	659
" 1916 ..	791	625	467	573	592	574	665
" 1917 ..	797	657	492	606	602	586	685
" 1918 ..	832	699	526	656	619	614	722
" 1919 ..	866	744	604	707	650	746	768
" 1920 ..	980	807	634	783	718	904	851

FOOD, GROCERIES AND HOUSING.							
Nov. 1914 ..	680	613	560	658	689	630	644
" 1915 ..	825	756	722	758	734	756	777
" 1916 ..	818	732	648	742	761	724	760
" 1917 ..	848	748	707	734	748	820	782
" 1918 ..	861	792	756	789	746	810	812
" 1919 ..	1,000	893	904	904	867	936	934
" 1920 ..	1,138	1,074	945	1,068	973	1,155	1,082

CLOTHING.							
Nov. 1914 ..	755	780	657	756	698	825	754
" 1915 ..	805	797	690	821	760	833	792
" 1916 ..	903	870	779	919	849	940	881
" 1917 ..	1,009	976	899	1,049	980	1,041	992
" 1918 ..	1,102	1,103	1,025	1,066	1,135	1,200	1,097
" 1919 ..	1,237	1,213	1,192	1,303	1,277	1,314	1,238
" 1920 ..	1,323	1,422	1,274	1,384	1,350	1,430	1,365

MISCELLANEOUS.							
Nov. 1914 ..	766	728	728	770	780	699	749
" 1915 ..	798	770	756	803	822	770	786
" 1916 ..	808	784	766	832	869	780	802
" 1917 ..	889	879	836	883	926	865	882
" 1918 ..	988	950	931	988	1,035	945	972
" 1919 ..	1,059	1,016	968	1,035	1,120	1,006	1,036
" 1920 ..	1,209	1,181	1,139	1,200	1,262	1,124	1,194

TOTAL HOUSEHOLD EXPENDITURE.							
Nov. 1914 ..	712	671	611	699	707	687	687
" 1915 ..	816	768	721	780	755	776	782
" 1916 ..	836	773	698	798	800	783	795
" 1917 ..	892	823	773	832	832	879	847
" 1918 ..	938	890	848	887	885	923	905
" 1919 ..	1,065	988	981	1,018	1,005	1,042	1,022
" 1920 ..	1,193	1,172	1,054	1,164	1,111	1,213	1,166



4. **Relative Cost of Each Group of Items.**—The following table shows for the towns covered by this Series of index-numbers the relative cost of each of the groups of household consumption :—

**RETAIL PRICE INDEX-NUMBERS: ("C" SERIES). ALL ITEMS OF HOUSEHOLD CONSUMPTION. RELATIVE COST OF EACH GROUP OF ITEMS.**

(Base : Weighted Average Cost of All Groups in each Town = 1,000.)

State and Town.	1941.					1942.				
	Food and Groceries.	Housing (4 & 5 Rooms).	Clothing.	Miscellaneous.	Total Household Expenditure.	Food and Groceries.	Housing (4 & 5 Rooms).	Clothing.	Miscellaneous.	Total Household Expenditure.
<b>NEW SOUTH WALES—</b>										
Sydney .. ..	337	234	239	190	1,000	338	218	259	185	1,000
Newcastle .. ..	361	209	246	184	1,000	362	196	266	176	1,000
Broken Hill .. ..	389	171	236	204	1,000	396	154	251	199	1,000
Goulburn .. ..	362	202	251	185	1,000	362	188	268	182	1,000
Bathurst .. ..	353	200	257	190	1,000	354	186	275	185	1,000
Weighted Average 5 Towns .. ..	341	230	240	189	1,000	342	215	259	184	1,000
<b>VICTORIA—</b>										
Melbourne .. ..	338	223	244	195	1,000	341	204	267	188	1,000
Ballarat .. ..	352	172	264	212	1,000	353	158	284	205	1,000
Bendigo .. ..	357	177	255	211	1,000	355	163	279	203	1,000
Geelong .. ..	340	209	251	200	1,000	338	194	273	195	1,000
Warrnambool .. ..	342	217	247	194	1,000	340	201	270	189	1,000
Weighted Average 5 Towns .. ..	338	220	243	197	1,000	342	201	268	189	1,000
<b>QUEENSLAND—</b>										
Brisbane .. ..	340	207	256	197	1,000	339	193	275	193	1,000
Toowoomba .. ..	327	207	260	206	1,000	331	193	276	200	1,000
Rockhampton .. ..	349	184	263	204	1,000	346	171	282	201	1,000
Townsville .. ..	353	198	249	200	1,000	351	186	269	194	1,000
Bundaberg .. ..	368	160	263	209	1,000	364	148	284	204	1,000
Weighted Average 5 Towns .. ..	341	204	256	199	1,000	341	189	276	194	1,000
<b>SOUTH AUSTRALIA—</b>										
Adelaide .. ..	330	208	250	212	1,000	340	192	264	204	1,000
Kadina, etc. .. ..	394	101	272	233	1,000	395	91	286	228	1,000
Port Pirie .. ..	371	169	250	210	1,000	373	156	266	205	1,000
Mount Gambier .. ..	348	173	260	219	1,000	348	161	277	214	1,000
Peterborough .. ..	361	182	251	206	1,000	361	166	268	205	1,000
Weighted Average 5 Towns .. ..	334	203	250	213	1,000	342	187	266	205	1,000
<b>WESTERN AUSTRALIA—</b>										
Perth, etc. .. ..	356	205	245	194	1,000	350	192	267	191	1,000
Kalgoorlie, etc. .. ..	357	259	214	170	1,000	361	225	238	176	1,000
Northam .. ..	368	203	241	188	1,000	360	192	260	188	1,000
Bunbury .. ..	353	227	240	180	1,000	349	213	258	180	1,000
Geraldton .. ..	341	234	230	195	1,000	338	219	250	193	1,000
Weighted Average 5 Towns .. ..	356	211	241	192	1,000	351	196	264	189	1,000
<b>TASMANIA—</b>										
Hobart .. ..	349	216	247	188	1,000	350	199	268	183	1,000
Launceston .. ..	351	204	254	191	1,000	349	190	273	188	1,000
Burnie .. ..	371	201	250	178	1,000	367	190	271	172	1,000
Devonport .. ..	372	187	259	182	1,000	368	175	281	176	1,000
Queenstown .. ..	378	190	250	182	1,000	372	178	273	177	1,000
Weighted Average 5 Towns .. ..	353	209	250	188	1,000	352	195	270	183	1,000
Weighted Average for 30 Towns .. ..	341	220	244	195	1,000	343	203	265	189	1,000
Weighted Average 6 Capital Cities .. ..	339	223	244	194	1,000	341	207	264	188	1,000
Charters Towers (Q.) .. ..	361	149	257	233	1,000	360	141	274	225	1,000
Warwick (Q.) .. ..	350	173	263	214	1,000	343	160	283	214	1,000
Port Augusta (S.A.) .. ..	380	162	250	206	1,000	374	151	269	206	1,000

## § 5. Retail Price Index-Numbers, 200 Towns.

To supplement the information collected monthly for the 30 towns specified in the preceding sections a special investigation into prices in 70 additional towns was made in November, 1913. This investigation was repeated in November, 1914, and again in November, 1915, when the number of additional towns was increased to 120. In November, 1923, the number was further increased to 170. Information in regard to prices obtained in November each year related up to 1942, therefore, to 200 towns. The results of the first investigation were published in *Labour Bulletin* No. 5 (pp. 26-33), and details of the succeeding investigations are incorporated in the *Labour Bulletins* and Reports issued subsequently by this Bureau.

In issues of the Official Year Book prior to No. 31, 1938, information is given regarding movements in the rents of 4-roomed and 5-roomed houses. While the index-numbers were useful in a general way as a measure of changes in rents in any one town from time to time, there has been an increasing tendency to regard them as an adequate measure of the relative absolute levels of rents in different towns at any given date. In order to prevent such a misuse of the figures, and because of increasing doubts as to the ability of the Bureau, except at prohibitive cost, to ensure that returns of rents from all these towns shall be based on continuously representative samples, it has reluctantly been decided to limit the information collected to the prices of food and groceries. Should any industrial tribunal desire further information on house rentals in any of these towns, the Bureau will be prepared to consider requests for special investigations by its field officers.

The tabulation of this series of index-numbers was continued up to November, 1942, but has been suspended for the period of the war owing to the demand for economy.

## § 6. Changes in the Regimen.

Since the original compilation of retail price indexes by the Bureau, the regimens of the several groups and sections have undergone some modifications. These are briefly referred to in the following paragraphs.

(i) *Food and Groceries*.—The regimen for food and groceries was originally introduced in 1912, and the first revision was made in the September quarter of 1932. A second revision took place in the September quarter of 1936, as part of the general revision of the regimen by the Conference of Statisticians of April, 1936. The main features of this revision are referred to in (iv) below.

(ii) *Housing*. The housing constituent of the regimen has also been revised. Originally the rentals of all houses from "3 rooms and under" to "8 rooms and over" were tabulated, and they were continuously used in the "A" series index from 1912 to 30th June, 1938, when this series was discontinued. They were also used in the "All Items" index up to and including the year 1924. From the following year rentals of 4 and 5-roomed houses only were used in the "C" series index, and in the same year they were combined with food and groceries to form the "B" series index.

Since the December quarter of 1936, following on the resolutions of the 1936 Conference of Statisticians, the rentals of 4 and 5-roomed houses in certain towns have been collected and tabulated on a somewhat different basis from that previously used. The returns in the twelve more important cities and towns show the rents of individual houses, on the basis of which variations from a pre-determined standard are measured. This standard, the change in which has affected the index-numbers only in respect of the relative levels of rents in the different towns, and in respect of their absolute height, was determined by means of a special investigation of the 1933 Census data relating to rentals of 4 and 5-roomed wood and brick houses occupied by fully-employed wage and salary earners. This method not being generally applicable to the circumstances of small country towns, on account of the greater diversity of average "quality" of houses, the level of rents in these towns has been determined from a sample of houses selected by house agents in accordance with definite standards laid down. The variations in rentals from this standard are measured in the same manner as described above for the twelve more important cities and towns.

(iii) *Clothing and Miscellaneous.* The regimen for clothing and miscellaneous household requirements was originally introduced in 1921, and the first revision was made in the March quarter of 1935. A second revision took place in the September quarter of 1936, as part of the general revision of the regimen by the Conference of Statisticians of April, 1936. Some minor alterations have since been made in the regimen.

(iv) *Revision of the Regimen by the Conference of Statisticians of April, 1936.* This revision was of a comprehensive nature. Conference not only recommended extensive revisions of the regimen from which the indexes are compiled, but also considered methods of collection and compilation. As a result of its deliberations, and subsequent discussions by correspondence, many improvements and refinements were introduced.

The changes in the regimen were made with a view to improving the index-numbers as measures of price variations. They comprised chiefly the elimination or replacement of articles no longer in demand, or which experience had shown to be unsuitable media for the measurement of price variations; the alteration of units of quantity in certain cases to conform with those in most general use; the adjustment of the mass unit allotted to certain articles to bring them into accord with present-day consumption habits; and the re-adjustment of the population weights applicable to the several groups and sections of the regimen in accordance with the results of the 1933 Census. Definite grades or qualities were also established for each article in the regimen, to ensure that quotations should be given, as far as possible, for the same article at all times and in all places. Improved methods of collecting and weighting average house rentals were also adopted (see (ii) above). The resolutions of the Conference were reprinted in Appendix XI. of *Labour Report* No. 27.

(v) *Basis of Retail Price Index-Numbers.* Notwithstanding the slight modifications which, as indicated above, have occurred at intervals in respect of both the items of the regimen and the "mass units" applicable thereto, these index-numbers represent the cost from time to time of a constant regimen of specified grades. They are primarily constructed to measure fluctuations in retail prices of commodities and services which commonly enter into what is colloquially referred to as "cost of living". The regimen does not embrace all items which enter into cost of living, but includes representative items whose grade and price can be ascertained with due precision in the various cities and towns of Australia month by month and quarter by quarter. While the "C" series retail price index-numbers are used by Industrial Tribunals for purposes of assessing the amount of quarterly variation in basic wage rates, the amount of the wage itself is determined by the Court without any regard whatsoever to the retail price regimen or its cost.

## B.—WHOLESALE PRICES AND PRICE INDEXES.

### § 1. Melbourne Wholesale Price Index.

1. *General.*—The data on which this section is based relate almost entirely to wholesale prices in Melbourne. An index of Sydney wholesale prices is compiled by the Government Statistician of New South Wales, and published in the *Year Book* and the *Monthly Summary of Business Statistics* of that State.

The index of Melbourne wholesale prices was first computed in 1912, and has been continued on the same lines since that year. The items included in the Melbourne wholesale price index comprise chiefly basic materials which in the form of raw material, food, or as a source of power, enter into production for home consumption. The purpose of the index, therefore, is to measure the changes in the prices of these particular materials rather than the changes in prices generally. As Australia does not, to any extent, manufacture from imported raw materials commodities for export, the local consumption appears to give the most appropriate weighting. Any lack of uniformity in the variations of the index-numbers for these wholesale prices and for retail prices would indicate broadly changes in the relation of manufacturing and distributing charges to the cost of basic materials.



2. Index-Numbers.—Index-Numbers for each group of commodities and for all groups together are shown in the following table:—

### INDEX-NUMBERS : MELBOURNE WHOLESALE PRICES, 1861 TO 1943.

(Base of each Group : Year 1911 = 1,000.)

Year.	I. Metals and Coal.	II. Wool, Cotton, Leather, etc.	III. Agri- cultural Produce, etc.	IV. Dairy Produce.	V. Gro- ceries.	VI. Meat.	VII. Building Materials.	VIII. Chemicals.	All Groups.	
1861	..	1,438	1,381	1,583	1,008	1,963	..	1,070	2,030	1,538
1871	..	1,096	1,257	1,236	864	1,586	..	1,044	1,409	1,220
1881	..	1,178	1,115	1,012	935	1,421	..	1,091	1,587	1,121
1891	..	895	847	1,024	995	1,032	888	780	1,194	945
1901	..	1,061	774	928	1,029	1,048	1,345	841	917	974
1902	..	1,007	756	1,192	1,215	945	1,447	837	881	1,051
1903	..	923	834	1,209	1,059	936	1,443	875	921	1,049
1904	..	821	885	754	876	916	1,427	845	875	890
1905	..	772	850	894	980	942	1,209	801	859	910
1906	..	882	978	916	972	923	1,110	896	864	948
1907	..	1,037	1,017	973	1,020	948	1,294	968	961	1,021
1908	..	1,033	901	1,312	1,198	968	1,335	935	891	1,115
1909	..	1,014	907	1,000	1,119	978	1,088	911	815	993
1910	..	1,004	1,052	969	1,100	999	1,008	996	898	1,003
1911	..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1912	..	1,021	991	1,370	1,206	1,052	1,357	1,057	978	1,170
1913	..	1,046	1,070	1,097	1,054	1,024	1,252	1,128	995	1,088
1914	..	1,099	1,032	1,207	1,137	1,021	1,507	1,081	1,253	1,149
1915	..	1,284	1,017	2,162	1,530	1,133	2,435	1,275	1,528	1,604
1916	..	1,695	1,423	1,208	1,485	1,322	2,515	1,491	1,760	1,504
1917	..	2,129	2,008	1,157	1,423	1,343	2,403	1,884	2,171	1,662
1918	..	2,416	2,360	1,444	1,454	1,422	2,385	2,686	3,225	1,934
1919	..	2,125	2,363	1,985	1,651	1,516	2,348	2,851	2,898	2,055
1920	..	2,298	2,624	2,439	2,209	1,918	3,279	3,226	2,825	2,480
1921	..	2,173	1,362	1,767	2,000	1,976	2,158	2,733	2,303	1,903
1922	..	1,942	1,681	1,628	1,648	1,869	1,787	2,005	1,965	1,758
1923	..	1,826	2,148	1,778	1,837	1,746	2,579	2,025	1,933	1,944
1924	..	1,835	2,418	1,647	1,655	1,721	2,223	1,815	1,806	1,885
1925	..	1,852	1,967	1,797	1,636	1,723	2,212	1,711	1,790	1,844
1926	..	1,938	1,582	2,001	1,784	1,731	1,931	1,665	1,816	1,832
1927	..	1,962	1,650	1,826	1,823	1,724	2,111	1,624	1,866	1,817
1928	..	1,912	1,781	1,726	1,751	1,707	2,015	1,744	1,923	1,792
1929	..	1,912	1,556	1,792	1,853	1,690	2,246	1,754	1,942	1,803
1930	..	1,866	1,127	1,484	1,627	1,666	2,025	1,875	1,982	1,596
1931	..	1,826	1,039	1,121	1,399	1,794	1,508	2,025	2,166	1,428
1932	..	1,736	1,000	1,230	1,303	1,767	1,348	2,043	2,127	1,411
1933	..	1,713	1,118	1,175	1,195	1,714	1,487	2,061	2,106	1,409
1934	..	1,660	1,261	1,288	1,274	1,735	1,540	2,015	2,018	1,471
1935	..	1,602	1,217	1,344	1,325	1,729	1,508	1,964	1,996	1,469
1936	..	1,566	1,331	1,480	1,351	1,731	1,684	1,969	1,997	1,543
1937	..	1,772	1,406	1,604	1,451	1,750	1,678	2,430	2,006	1,656
1938	..	1,746	1,051	1,789	1,549	1,747	1,871	2,238	2,059	1,662
1939	..	1,758	1,101	1,820	1,557	1,752	1,710	2,220	2,075	1,665
1940	..	1,854	1,362	1,568	1,567	1,784	1,882	2,890	2,298	1,713
1941	..	1,960	1,402	1,721	1,554	1,884	1,776	3,138	2,527	1,796
1942	..	2,146	1,507	1,900	1,665	1,937	2,312	3,409	2,437	1,977
1943	..	2,272	1,945	1,964	1,716	1,937	2,366	3,764	2,442	2,117

NOTE.—The figures given in this table are comparable in the vertical columns but are not directly comparable horizontally.

## § 2. Basic Materials and Foodstuffs.

1. General.—As mentioned above, the Melbourne wholesale price index was first computed in 1912. Neither the component items nor the weighting have been varied. Consequently the index is a measure of changes in wholesale price levels based on usages which have altered substantially since the period on which the weighting was determined. As such it is useful as an indication of long-term trends over the past eighty-three years

which it covers, on the assumption that the relative importance of component items remained constant. But it no longer serves as a measure of price variations from month to month or from year to year of commodities weighted in accordance with present day consumption. Reference to a description of the index published in the annual *Labour Report* will indicate that animal fodders preponderate in the "Agricultural Produce" group, while "Building Materials" include little besides imported timber. In other groups, some principal items have increased in consumption while others have decreased. It was resolved, therefore, at the Conference of Statisticians at Brisbane in 1930 that the time had come to revise and extend the items included in order to bring the index into line with changed conditions. An investigation to that end was commenced, and in the course of the past few years, many new price-series have been collected on a monthly basis back to January, 1928. Some of these have been incorporated in a new index of the prices of basic materials and foodstuffs, preliminary index-numbers of which are currently published in the *Monthly Review of Business Statistics*. Others are being incorporated in a number of "special-purpose" indexes, which it is hoped to publish in the future. Their construction has been delayed in order to make use, for weighting purposes, of the larger amount of information which is now becoming available as the result of the collection of more extensive statistics of factory production. The price quotations have in the main been obtained directly from manufacturers and merchants and, with a few important exceptions, from Melbourne sources. Apart from home-produced building materials, coal and one or two minor commodities, however, the price movements may be taken as representative of fluctuations in wholesale prices of basic materials in most Australian markets. The weighting system adopted is based on average annual consumption during the years 1928-29 to 1934-35 inclusive. In the meantime, however, the original index has been continued on existing lines, as set out in § 1 on page 452.

2. *Index-numbers.*—Index-numbers for each group of commodities and for all groups combined for this new index of wholesale prices of basic materials and foodstuffs are given in the following table.

### INDEX-NUMBERS: BASIC MATERIALS AND FOODSTUFFS, 1928-29 TO 1943-44.

(Base: average 3 years ended June, 1939 = 1,000.)

Period.	Metals and Coal.	Oils, Fats and Waxes.	Tex- tiles.	Chem- icals.	Rubber and Hides.	Build- ing Ma- terials.	Food- stuffs and To- bacco.	Goods princi- pally Im- ported.	princi- pally Home Pro- duced.	All Groups.
1928-29 ..	1,269	1,064	1,288	1,214	1,148	948	1,070	911	1,183	1,103
1934-35 ..	972	896	784	1,020	774	930	873	920	886	898
1935-36 ..	920	952	997	991	879	930	917	945	918	926
1936-37 ..	962	984	1,185	988	1,106	989	974	991	980	984
1937-38 ..	1,013	1,012	1,000	1,001	969	1,041	997	1,018	1,000	1,005
1938-39 ..	1,025	1,004	815	1,011	925	970	1,029	991	1,020	1,011
1939-40 ..	1,051	1,152	1,038	1,068	1,163	1,084	1,012	1,106	1,025	1,047
1940-41 ..	1,074	1,374	1,105	1,236	1,256	1,284	1,069	1,325	1,060	1,140
1941-42 ..	1,173	1,509	1,184	1,372	1,350	1,352	1,169	1,525	1,123	1,242
1942-43 ..	1,288	1,667	1,471	1,422	1,383	1,628	1,276	1,760	1,210	1,372
1940-41—										
July ..	1,060	1,362	1,077	1,221	1,208	1,220	1,052	1,240	1,063	1,115
August ..	1,060	1,356	1,063	1,231	1,206	1,288	1,067	1,251	1,082	1,131
September ..	1,060	1,353	1,079	1,231	1,207	1,288	1,073	1,247	1,088	1,135
October ..	1,067	1,364	1,095	1,229	1,216	1,288	1,076	1,274	1,083	1,140
November ..	1,067	1,364	1,092	1,237	1,277	1,288	1,042	1,269	1,062	1,123
December ..	1,067	1,368	1,097	1,237	1,270	1,288	1,102	1,356	1,072	1,156
January ..	1,075	1,367	1,099	1,238	1,254	1,283	1,109	1,357	1,077	1,161
February ..	1,076	1,365	1,097	1,238	1,245	1,284	1,067	1,362	1,043	1,138
March ..	1,076	1,366	1,118	1,241	1,256	1,284	1,059	1,362	1,037	1,133
April ..	1,088	1,410	1,131	1,241	1,287	1,284	1,062	1,382	1,043	1,143
May ..	1,090	1,410	1,153	1,241	1,355	1,307	1,061	1,401	1,040	1,147
June ..	1,090	1,411	1,155	1,241	1,295	1,307	1,064	1,402	1,041	1,149

INDEX-NUMBERS: BASIC MATERIALS AND FOODSTUFFS, 1928-29 TO  
1943-44—continued.

Period.	Metals and Coal.	Oils, Fats and Waxes.	Tex- tiles.	Chem- icals.	Rubber and Hides.	Build- ing Ma- terials.	Food- stuffs and To- bacco.	Goods princi- pally Im- ported.	Goods princi- pally Home Pro- duced.	All Groups
1941-42—										
July ..	1,123	1,412	1,131	1,241	1,300	1,310	1,099	1,416	1,070	1,172
August ..	1,127	1,437	1,145	1,265	1,299	1,310	1,130	1,425	1,097	1,195
September ..	1,165	1,401	1,157	1,363	1,299	1,310	1,144	1,472	1,108	1,215
October ..	1,165	1,405	1,172	1,363	1,302	1,317	1,144	1,491	1,102	1,217
November ..	1,165	1,491	1,177	1,391	1,339	1,326	1,146	1,527	1,097	1,225
December ..	1,173	1,489	1,171	1,391	1,364	1,326	1,125	1,516	1,088	1,215
January ..	1,173	1,522	1,166	1,406	1,420	1,326	1,130	1,511	1,102	1,223
February ..	1,175	1,530	1,185	1,406	1,432	1,326	1,154	1,507	1,124	1,237
March ..	1,175	1,576	1,197	1,408	1,365	1,326	1,160	1,523	1,130	1,246
April ..	1,206	1,574	1,221	1,408	1,364	1,326	1,191	1,540	1,154	1,269
May ..	1,208	1,574	1,242	1,410	1,361	1,516	1,270	1,680	1,181	1,327
June ..	1,213	1,574	1,238	1,410	1,361	1,514	1,326	1,694	1,219	1,358
1942-43—										
July ..	1,213	1,590	1,363	1,410	1,361	1,514	1,311	1,653	1,232	1,356
August ..	1,234	1,644	1,359	1,410	1,361	1,516	1,318	1,661	1,247	1,369
September ..	1,237	1,644	1,381	1,410	1,361	1,516	1,334	1,724	1,237	1,379
October ..	1,302	1,649	1,386	1,410	1,361	1,516	1,292	1,721	1,219	1,367
November ..	1,308	1,651	1,391	1,425	1,361	1,529	1,281	1,750	1,205	1,365
December ..	1,308	1,684	1,484	1,425	1,358	1,691	1,255	1,801	1,193	1,371
January ..	1,308	1,686	1,544	1,425	1,406	1,691	1,210	1,797	1,166	1,349
February ..	1,308	1,688	1,535	1,429	1,406	1,701	1,234	1,790	1,185	1,363
March ..	1,308	1,693	1,544	1,429	1,406	1,701	1,258	1,802	1,200	1,377
April ..	1,310	1,693	1,521	1,430	1,406	1,709	1,266	1,807	1,205	1,382
May ..	1,310	1,693	1,573	1,430	1,406	1,709	1,267	1,801	1,211	1,384
June ..	1,310	1,693	1,574	1,430	1,406	1,741	1,291	1,824	1,222	1,399
1943-44—										
July ..	1,310	1,694	1,569	1,433	1,406	1,741	1,297	1,824	1,228	1,404
August ..	1,310	1,694	1,541	1,433	1,406	1,741	1,283	1,823	1,216	1,395
September ..	1,310	1,694	1,502	1,433	1,406	1,741	1,290	1,828	1,218	1,397
October ..	1,310	1,694	1,507	1,433	1,406	1,741	1,279	1,826	1,210	1,392
November ..	1,310	1,694	1,436	1,433	1,406	1,741	1,279	1,843	1,200	1,389
December ..	1,310	1,694	1,499	1,433	1,406	1,743	1,274	1,835	1,203	1,389

## C. THE CONTROL OF PRICES.

## §1. War-time Measures.

1. **General.**—Immediately after the outbreak of war the Commonwealth Government undertook control of prices and issued proclamations fixing as maximum prices of certain specified goods those prevailing on 31st August, 1939. These initial proclamations were issued by the Minister for Trade and Customs from day to day to peg prices of commodities which had been raised or seemed likely to rise. These were emergency measures to hold prices in check pending establishment of machinery for price control.

At a Premiers' Conference held in Canberra on 9th September, 1939, agreement was reached as to the basis for co-operation between the State Governments and the Commonwealth in administering price control, and on 28th September the National Security (Prices) Regulations were proclaimed by the Commonwealth under authority of the National Security Act. The Regulations established the basic principles of price control law, provided for the appointment of a Commonwealth Prices Commissioner and conferred upon him extensive powers to control the price of goods declared for that purpose by the Minister for Trade and Customs.

2. **State and Commonwealth Administration.**—Price control is administered jointly by the Commonwealth and the States. The central office is located in Canberra and is a Commonwealth administration, being a branch of the Department of Trade and Customs. In September, 1939, a Deputy Prices Commissioner was appointed in each State by the Commonwealth on the nomination of the State Government, and the staffs were recruited partly from Commonwealth and partly from State officers. Deputy



Commissioners administer the Commonwealth Prices Regulations under the supervision of the Commonwealth Prices Commissioner who makes prices orders under the Regulations. Close co-operation is maintained with State instrumentalities which dealt with prices before the war, and with State Government Departments, such as Agriculture and Forestry, in relation to primary products.

**3. Initial Phase of Control : Automatic Adjustment of Prices to Increases in Costs.**—In order to avoid delays in the distribution of goods, general principles were adopted by the Prices Administration late in September, 1939, providing for the automatic adjustment of prices to increases in costs.

These principles were set out in Prices Regulation Order No. 2, which was amended from time to time, and finally consolidated in Prices Regulation Order No. 100. Selling prices were to be calculated by traders themselves on principles laid down in the Order, subject to official check. The basis of such prices was the cost of the goods being sold, plus a gross profit margin. This cost was defined in the Order as the actual into-store cost of goods being sold or, in certain circumstances, as the average cost of all goods held in stock at a given date. Replacement costs were never allowed as a basis for prices. Traders were in general allowed to add the percentage margin of profit which they had added to costs on 31st August, 1939. The Prices Commissioner could increase margins where they were shown to be inadequate, or reduce them where they were deemed to allow too high a rate of net profit, either because of increased turnover or because of their high basic level.

Many commodities were excluded from the operation of the general Orders, and for these specific prices were fixed. Generally, such prices were calculated on the same principles as set out in Orders No. 2 and 100, but in special cases formulae were prescribed for the absorption into prices of increases in specified costs.

**4. Change in Methods of Price Control : Pegging Profit Margins.**—An important change in the methods of price control was introduced in April, 1942, by the issue of Prices Regulation Order No. 666 which limited the trader's profit margin to the actual money margin obtaining on 15th April, 1942. From that date onwards the trader was allowed to increase his price only by the actual amount of increased cost. Increases in money margins of profit were permitted only with special approval. This new principle was adopted because the combination of increasing costs, increasing turnover and pre-war percentage profit margins resulted in many instances in net profits substantially greater than before the war. It was considered that traders could carry on with profit margins fixed in money amount without detriment to their general financial position.

At this time also Australia was entering on a period of total war demanding all-round sacrifices, and the new measure of price control was introduced shortly after the pegging of interest, rent and wages. Following on the entry of Japan into the war in December, 1941, costs of many goods imported into Australia rose substantially and so did costs of certain locally produced goods because of the withdrawal of a very large proportion of efficient labour from productive industry to war services. The retail price index-number rose by 9.5 per cent. in the first twelve months of the Pacific war (i.e. during 1942) compared with 5.4 per cent. in the previous year and 4.6 per cent. in the first twelve months of war.

**5. Comments on Early Phases of Price Control.**—The method of adjusting prices automatically to cover increasing costs gave flexibility and speed to the administration of price control when these qualities were highly important under the rapidly changing conditions of an economy transferring to a war footing under great strain. But it had weaknesses.

Firstly, rising costs and prices were disturbing to a community settling down to a total war effort. The continued rise of prices and uncertainty, as to their future course created a feeling that profiteering was occurring and fear that inflation would occur. This was damaging to morale. Moreover, since costs could usually be covered by rises in price, there was no direct incentive for business men to increase efficiency to offset increasing costs. The level of wages had continually to be adjusted to the changing level of prices and public finances were continually disturbed by the changing levels of costs and prices.

6. **Price Stabilization.**—The next phase of price control was designed to secure price stability and was based partly on the Canadian Plan for an over-all ceiling price of goods and services. On 12th April, 1943, Prices Regulation Order No. 1,015 fixed, as ceiling prices, the prices actually being charged by individual traders on that date. There were certain exceptions mainly perishable primary products. Special ceiling prices, to accommodate seasonal fluctuation, had already been arranged for most of these cases.

The ceiling applied not only to retail prices but to all prices, at every stage of production, manufacture and distribution. Every trader's selling prices were fixed as at those prevailing on the ceiling date, but so also were the prices he had to pay for his materials. Rents and interest rates were fixed and, in general, wage rates were pegged (except for "cost of living" adjustments) in February, 1942.

7. **Rising Costs.**—The price ceiling could not, however, eliminate all rising costs. A substantial proportion of materials is imported and prices paid overseas for imports cannot be controlled. Materials produced in Australia may have to be produced from less accessible or more restricted sources so that their real cost of production rises. Again, in some cases, war time stresses make it imperative to correct anomalies in the income structure with the result that various sections of primary producers and wage-earners receive increased incomes which represent increased costs.

These cost increases have to be met in some way which will not involve piercing the price ceiling.

8. **Price Changes within the Price Stabilization Policy.**—The price ceiling is not, as the expression implies, an indication of the Government's determination to peg rigidly every individual price at its level on a certain date, but rather evidence of the Government's intention not to allow the general price level, which is one of the most important determinants of the community's welfare, to be subject to the war-time vagaries of the cost structure. Over the major part of the field the cost structure itself has been stabilized. Where it is not, the price level is, in general, divorced from the cost structure and is determined in accordance with Government policy. Increases in costs are met in such ways as are consistent with that policy.

In some cases increases in prices are permitted. Sales to Government Departments are normally at a price high enough to cover costs of production. Where some manufacturer or trader, later in the chain of production and distribution, could absorb higher costs, the prices allowed to be charged by the suppliers of his materials may be increased. Where one trader, producing in competition with others, has a ceiling price lower than that of his competitors, he may be allowed to raise his price towards the general level, and thus absorb some of the increased costs. Such adjustments are in general managed in such a way as to avoid a breach of the price stabilization policy, and to leave the general price level, as it affects consumers, practically unchanged.

Moreover, within the price ceiling, each trader is required to reduce his prices in accordance with Prices Regulations Orders 666 and 667 whenever a downward movement in his costs would require, under those Orders, a reduction of his prices below the ceiling.

9. **Treatment of Costs.**—Although the present plan provides for certain increases in prices, price rises are the exception rather than the rule. Whenever increased costs cannot be absorbed within the process of production or distribution, they are met at the source by the payment of subsidies and thus prevented from disturbing the whole price structure.

Any trader in need of relief submits his case to the Prices Branch. If, on investigation, his production is regarded as essential, and relief is necessary and cannot be given without piercing the ceiling, the case is referred to a Price Stabilization Committee, whose first concern is to see whether all or part of the increased costs could be offset by increased economies in production, or absorbed by the trader through a reduction of profit. When the Committee is satisfied that relief is required and that a price increase would be inconsistent with the Government's policy of price stabilization, it recommends to the Minister for Trade and Customs that a subsidy be paid. This recommendation, if approved by the Minister, is subject to final approval by the Treasurer.

In cases where a *prima facie* case for relief is established, temporary subsidies are paid pending full investigation. This is particularly important in the case of imports,



for importers receive full protection against increasing overseas prices, which are now the main cause of rising costs in Australia. Importers can ascertain, before placing orders, whether their proposed imports will be regarded as essential. Subsidies are paid in full, immediately on production of documents showing that the goods have arrived, and that the landed costs are higher than the costs which are the basis of existing ceilings.

The Commonwealth Prices Commissioner has ample powers to correct any abuses that may arise under the subsidy scheme, which is an indispensable part of the price ceiling plan.

**10. Special Action.**—In addition to the measure designed to stabilize the general price level, special steps were proposed to correct certain deficiencies in the price structure. On account of the large proportion of imported materials used in the textile industries, the prices of clothing and household drapery had risen far more rapidly than had other prices. Similarly, vegetable and fruit prices were out of line owing to man-power shortages and the vagaries of the seasons. Furthermore, civilian production was falling below the essential level and threatened to make price control increasingly difficult.

It was, therefore, necessary to take action to control and re-organize the production and distribution of certain goods, particularly clothing, meat and vegetables.

**11. Maximum Prices.**—As long as the ceiling consisted of prices determined for each trader by the price charged on 12th April, 1943, ample room existed for uncertainty among purchasers as to what was the legal ceiling price, and even for evasion.

To meet this difficulty the Prices Branch has extended its policy of fixing specific maximum prices which no trader can exceed, whatever may have been his price on 12th April, 1943. Under these Orders the consumer knows what is the highest price he can be charged and the Administration is in a stronger position to police its Prices Regulations Orders. Some important Orders in this category have been made. Specific maximum prices have been fixed for hundreds of grocery lines, for many fruits and vegetables throughout Australia, for woollen piecegoods, for cotton yarns, for woollen goods, for standard cloths and for meat sold at wholesale rates.

A further development in this direction is the widening of the group of commodities in respect of which traders are required either to display a list of maximum prices or to mark the goods themselves with actual selling prices. Groceries, some fruit and vegetables, liquor and furniture are included in this group.

**12. Governmental Action to adjust increases in the Cost of Living.**—At the time the price ceiling was introduced the most recent measurement of retail prices was for March quarter 1943 and represented prices about the middle of February or in the case of food and groceries the average of the months—January to March inclusive. Between these dates and the 12th April, 1943, when the ceiling was imposed, there was a lapse of time, and, as was expected the retail price index for June quarter was appreciably higher than that for March quarter. This was due to various causes. Seasonal rises had taken place in the prices of potatoes, meat and eggs. The new supply of winter clothing came on to the retail market in June quarter and many important lines had shown substantial increases in price. There were also some adjustments that had to be made to retail prices to absorb increases in wholesale costs that were still outstanding when the ceiling was introduced. Through the operation of the automatic "cost of living" adjustment clauses of the industrial awards, this rise in the retail price index for June quarter necessitated an increase in the basic wage and this involved increased costs for all employing labour.

The Government was aware at the time it introduced the price stabilization policy that this situation would probably arise, and as soon as it was advised of the nature and extent of the rise it took the necessary steps to absorb the rise in costs, firstly by undertaking to refund to employers amounts paid as basic wage increases and secondly by reducing prices in such a way as to offset the price increases that had occurred.

These measures were announced on 21st July, 1943. The price of tea was reduced by 1s. 2d. per lb. to its pre-war level and the standard retail maximum price for potatoes was fixed at 5 lb. for 6d. (capital city basis). In the former case importers and in the latter case growers received a subsidy. At the same time sales tax on clothing and textiles was also reduced from 12½ to 7½ per cent. to take effect as existing stocks were cleared



off. Simultaneously, measures were adopted to increase supplies of civilian clothing (up to rationed requirements) at stable prices; to increase supplies of fruit and vegetables and to regulate meat prices seasonally.

The range of commodities chosen for reduction was small but all were universally consumed so that it was certain that the benefit of the reduction would be spread widely throughout the community. Prices of tea had risen by 50 per cent. and of clothing by an average of 75 per cent. since the outbreak of the war and seasonal fluctuations in potato prices had had most disturbing effects on the retail price index-number.

These measures were subsequently supplemented by administrative action to improve production and distribution of certain other goods and by December quarter 1943, the retail price index-number was again close to the pre-ceiling level of March quarter 1943.

The movement in the Retail Price Index-numbers since the September quarter 1939, is shown below:—

#### RETAIL PRICE INDEX-NUMBERS—1939-1944.

Base: September, 1939 = 1000.

Period.	Food.	Rent.	Clothing.	Miscellaneous.	AR Items "C" Series.
September quarter 1939 ..	1000	1000	1000	1000	1000
" " 1940 ..	1019	1006	1146	1049	1046
" " 1941 ..	1017	1009	1349	1117	1102
" " 1942 ..	1147	1009	1605	1155	1207
March quarter 1943 ..	1130	1008	1685	1196	1226
June quarter 1943 ..	1150	1008	1754	1205	1248
September quarter 1943 ..	1126	1008	1734	1212	1237
December quarter 1943 ..	1104	1008	1718	1215	1226
March quarter 1944 ..	1109	1009	1715	1213	1227
June quarter 1944 ..	1115	1009	1709	1212	1228

#### D.—WAGES.

##### § 1. Operations under Wages Board and Industrial Arbitration Acts.

1. **General.**—Particulars regarding operations under the Commonwealth and State Acts for the regulation of wages, hours and conditions of labour were first compiled for the year 1913, and reviews to the end of each annual period appear in the *Labour Reports* and in the *Quarterly Summaries of Australian Statistics*.

2. **Awards, Determinations and Industrial Agreements.**—The following table gives a summary for each of the years 1938-1942:—

##### AWARDS AND DETERMINATIONS MADE AND INDUSTRIAL AGREEMENTS FILED.

State.	1938.		1939.		1940.		1941.		1942.	
	Awards or Determinations made.	Agreements Filed.	Awards or Determinations made.	Agreements Filed.	Awards or Determinations made.	Agreements Filed.	Awards or Determinations made.	Agreements Filed.	Awards or Determinations made.	Agreements Filed.
New South Wales ..	64	38	64	17	70	22	65	49	72	23
Victoria ..	99	..	173	..	170	..	262	..	202	..
Queensland ..	38	38	50	25	34	45	45	14	15	37
South Australia ..	6	4	18	7	53	7	167	8	160	12
Western Australia ..	28	31	20	25	31	21	22	19	18	20
Tasmania ..	26	..	18	..	18	..	28	..	22	..
Commonwealth Court	31	13	31	21	25	13	7	3	52	20
Commonwealth Public Service	..	..	..	..	..	..	..	..	..	..
Arbitrator ..	3	..	1	..	1	..	5	..	4	..
Total ..	295	124	375	95	402	108	601	93	545	112

3. **Boards Authorized, Awards, etc., in Force.**—Owing to difficulties encountered in the collection of these statistics the tables previously shown under this heading have been discontinued.

## § 2. Rates of Wages and Hours of Labour.

1. **General.**—The collection of information respecting the current rates of wage payable in different callings and in occupations in various industries was first undertaken by this Bureau in the early part of 1913. The particulars are obtained primarily from awards, determinations and agreements under Commonwealth and State Industrial Acts, and therefore are the minimum rates prescribed. They refer generally to the capital city in each State, but in industries which are not carried on in the capital cities, e.g., mining, agriculture, etc., the rates in the more important centres are taken. In cases where no award, determination, or agreement is in force, particulars are taken of the ruling union or predominant rate. During recent years the number of predominant rates of wage included in the tabulations has been reduced considerably, as most of the industries and occupations are now covered by awards, determinations, or industrial agreements.

The index-numbers for male adult workers are computed with the weighted average wage in 1911 as base (= 1,000). In the case of females, however, it has not been possible to secure information for the years prior to 1914, and the index-numbers are therefore computed with the weighted average rate of wage payable to adult female workers in Australia at 30th April, 1914 as base (= 1,000).

An extensive tabular presentation of the minimum rates of wage for adult male and female workers in the main occupations in the capital city of each State is given each year in the Appendix to the *Labour Report*.

2. **Weekly Rates of Wage, 1938 to 1942.**—(i) *General.* The arithmetical average of the rates of wage given in the Appendix referred to is taken for each industrial group. These averages are weighted in accordance with census results to give the average of all occupations for the States and for Australia.

(ii) *Adult Males—States.* The following table gives the weighted average nominal weekly rates of wage payable to adult male workers at the dates specified :—

## WAGE RATES OF ADULT MALES.

## WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK AND INDEX-NUMBERS OF WAGE RATES.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
No. of Occupations included ..	874	909	627	567	489	482	3,948

## RATES OF WAGE.

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
31st December, 1938 ..	95 0	91 2	95 10	87 1	99 1	88 5	93 5
" " 1939 ..	96 7	93 6	97 5	88 11	100 6	89 5	95 3
" " 1940 ..	99 7	97 0	97 9	92 11	104 0	92 7	98 1
" " 1941 ..	105 4	104 5	101 9	100 3	110 2	99 3	104 3
31st March, 1942 ..	109 7	106 11	103 8	102 1	110 10	102 6	107 2
30th June, 1942 ..	111 3	109 4	106 2	103 5	110 11	104 1	109 0
30th September, 1942 ..	114 0	112 6	108 6	105 8	114 9	106 9	111 10
31st December, 1942 ..	118 3	116 7	110 2	112 3	117 7	108 2	115 8

## INDEX-NUMBERS.

(Base : Weighted Average Wage for Australia (51s. 3d.), 1911 = 1,000.)

31st December, 1938 ..	1,854	1,780	1,870	1,700	1,933	1,725	1,823
" " 1939 ..	1,885	1,825	1,900	1,735	1,962	1,745	1,858
" " 1940 ..	1,943	1,892	1,908	1,812	2,029	1,807	1,913
" " 1941 ..	2,056	2,037	1,985	1,957	2,149	1,937	2,034
31st March, 1942 ..	2,138	2,086	2,023	1,992	2,162	2,001	2,091
30th June, 1942 ..	2,171	2,133	2,072	2,018	2,164	2,031	2,127
30th September, 1942 ..	2,224	2,194	2,117	2,061	2,239	2,084	2,182
31st December, 1942 ..	2,308	2,275	2,150	2,189	2,294	2,111	2,257

Wages declined in all States during the three years 1931 to 1933, the average rates at 31st December of the latter year being approximately 17 per cent. less than those ruling at the end of 1930. Increases were granted in each of the States during the next six years and the weighted average nominal rate for Australia at 31st December, 1942, was 35s. 2d. per week more than in 1933 and 19.6 per cent. above the average at 31st December, 1930. At the close of 1942, rates were highest in New South Wales, followed in the order named by Western Australia, Victoria, South Australia, Queensland and Tasmania. The highest weighted average rate for Australia was recorded at 31st December, 1942, namely, 115s. 8d. per week.

(iii) *Adult Males—Industrial Groups.* The following table shows for Australia the average weekly rates of wage and index-numbers in each industrial group, and for all groups at the dates specified.

WAGE RATES OF ADULT MALES.

WEIGHTED AVERAGE NOMINAL WEEKLY RATES FOR A FULL WEEK'S WORK AND INDEX-NUMBERS OF WAGE RATES IN EACH INDUSTRIAL GROUP.

NOTE.—Index-numbers for each industrial group and for all industrial groups are based on the average wage for all groups in 1911 (51s. 3d.) = 1,000. The index-numbers in this table are comparable throughout:—

Industrial Group.	Weighted Average Nominal Weekly Rate of Wage and Index-number at—							
	31st Dec., 1938.	31st Dec., 1939.	31st Dec., 1940.	31st Dec., 1941.	31st Mar., 1942.	30th June, 1942.	30th Sept., 1942.	31st Dec., 1942.
I. Wood, Furniture, etc. { Wage ..	98/2	100/1	102/11	108/5	111/2	113/0	115/3	118/2
.. { Index-No.	1,916	1,953	2,008	2,116	2,169	2,204	2,250	2,306
II. Engineering, etc. { Wage ..	97/8	99/3	102/5	110/0	112/5	114/5	116/3	118/11
.. { Index-No.	1,906	1,936	1,998	2,147	2,194	2,232	2,269	2,321
III. Food, Drink, etc. { Wage ..	95/2	96/9	99/3	106/1	108/0	109/6	111/5	114/3
.. { Index-No.	1,857	1,888	1,937	2,071	2,107	2,137	2,173	2,229
IV. Clothing, Boots, etc. { Wage ..	91/9	93/2	96/4	105/7	108/11	111/2	112/8	116/10
.. { Index-No.	1,790	1,817	1,880	2,060	2,124	2,170	2,198	2,280
V. Books, Printing, etc. { Wage ..	112/0	114/3	116/0	119/6	121/0	124/3	124/6	131/4
.. { Index-No.	2,185	2,229	2,264	2,332	2,361	2,425	2,429	2,562
VI. Other Manu- facturing { Wage ..	94/4	95/8	99/0	107/0	108/5	110/8	113/5	116/4
.. { Index-No.	1,840	1,867	1,931	2,088	2,116	2,159	2,233	2,270
VII. Building .. { Wage ..	104/6	106/5	109/11	116/11	119/9	121/11	124/9	127/3
.. { Index-No.	2,039	2,076	2,145	2,282	2,337	2,380	2,433	2,484
VIII. Mining, etc. .. { Wage ..	108/2	109/10	111/10	115/1	115/7	118/0	121/11	123/9
.. { Index-No.	2,111	2,142	2,182	2,245	2,256	2,302	2,378	2,415
IX. Railways, etc. .. { Wage ..	95/5	96/7	100/3	108/8	110/3	112/9	116/3	118/9
.. { Index-No.	1,862	1,884	1,957	2,121	2,152	2,200	2,268	2,316
X. Other Land Transport { Wage ..	91/7	92/10	96/3	101/11	103/6	105/4	107/10	110/3
.. { Index-No.	1,787	1,812	1,878	1,989	2,019	2,055	2,104	2,151
XI. Shipping, etc. (a) { Wage ..	97/6	98/6	102/6	106/9	112/5	114/2	117/8	119/9
.. { Index-No.	1,902	1,922	2,001	2,082	2,194	2,228	2,296	2,336
XII. Agricultural, etc. (b) { Wage ..	82/3	84/0	85/8	93/6	99/3	100/2	103/7	111/8
.. { Index-No.	1,604	1,639	1,671	1,825	1,937	1,954	2,021	2,179
XIII. Domestic, etc. (b) { Wage ..	88/3	89/11	93/0	97/10	99/10	101/9	104/5	107/5
.. { Index-No.	1,722	1,755	1,815	1,908	1,948	1,985	2,038	2,095
XIV. Miscellaneous .. { Wage ..	90/5	92/10	96/3	101/2	103/5	105/6	108/2	111/1
.. { Index-No.	1,764	1,811	1,878	1,974	2,018	2,059	2,110	2,167
All Industrial Groups.. { Wage ..	93/5	95/3	98/1	104/3	107/2	109/0	111/10	115/8
.. { Index-No.	1,823	1,858	1,913	2,034	2,091	2,127	2,182	2,257

(a) Includes the value of victualling and accommodation where supplied.  
of board and lodging where supplied.

(b) Includes the value



The foregoing table shows that the highest average weekly wage at 31st December, 1942, was recorded in Group V. (Books, Printing, etc.), 131s. 4d. per week, followed by Groups VII. (Building), 127s. 3d., VIII. (Mining, etc.), 123s. 9d., XI. (Shipping, etc.), 119s. 9d., II. (Engineering, etc.), 118s. 11d., IX. (Railways, etc.), 118s. 9d. and I. (Wood, Furniture, etc.), 118s. 2d. The lowest average rate was recorded in Group XIII. (Domestic, etc.), 107s. 5d. During the year rates of wage increased in all groups, the greatest increases occurring in the following:—Agricultural, etc., 18s. 2d.; Shipping, etc., 13s. 0d.; Books, printing, etc., 11s. 10d.; Clothing, etc., 11s. 3d.; Building, 10s. 4d.; Railways, etc., 10s. 1d.; Miscellaneous, 9s. 11d.; Wood, furniture, etc., 9s. 9d.; Other manufacturing, 9s. 4d.; Engineering, &c., 8s. 11d.; Mining, 8s. 8d.; Other land transport, 8s. 4d.; and Food, etc., 8s. 2d. The increase during the year in the weighted average rate for all groups was 11s. 5d.

(iv) *Adult Females—States.* The following table shows the weighted average nominal weekly rates of wage payable to adult female workers for a full week's work in each State and Australia at the dates specified.

### WAGE RATES OF ADULT FEMALES.

WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK AND INDEX-NUMBERS OF WAGE RATES.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
No. of Occupations included ..	85	87	37	47	24	28	308

### RATES OF WAGE.

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
31st December, 1938 ..	51 10	50 7	53 6	47 9	54 4	49 8	51 3
" " 1939 ..	53 3	51 9	55 2	49 7	55 8	50 8	52 8
" " 1940 ..	54 9	53 5	56 0	52 1	57 6	53 1	54 3
" " 1941 ..	57 11	58 4	59 6	55 5	60 4	56 7	58 2
31st March, 1942 ..	59 7	59 10	60 8	56 8	60 4	57 11	59 2
30th June, 1942 ..	60 10	61 2	62 3	57 5	60 4	58 10	60 10
30th September, 1942 ..	61 7	62 2	62 8	57 7	62 7	59 10	61 7
31st December, 1942 ..	63 10	64 11	66 4	60 3	64 2	61 3	64 4

### INDEX-NUMBERS.

Base. *Weighted Average for Australia* (27s. 2d.), 30th April, 1914 = 1,000.

	1,907	1,862	1,960	1,758	2,000	1,828	1,887
31st December, 1938 ..	1,907	1,906	2,031	1,826	2,049	1,866	1,938
" " 1939 ..	2,016	1,966	2,060	1,916	2,116	1,954	1,996
" " 1940 ..	2,133	2,148	2,191	2,038	2,220	2,082	2,141
" " 1941 ..	2,194	2,201	2,233	2,085	2,220	2,130	2,178
31st March, 1942 ..	2,238	2,252	2,290	2,114	2,220	2,166	2,238
30th June, 1942 ..	2,266	2,287	2,305	2,121	2,303	2,202	2,268
30th September, 1942 ..	2,350	2,391	2,442	2,216	2,361	2,255	2,368
31st December, 1942 ..							

Female rates followed the same downward course as male rates from 1931 to 1933. The weekly average nominal wage for Australia fell from 53s. 7d. at 31st December, 1930, to 43s. 5d. at the same date in 1933, a decline of 10s. 2d., or 19 per cent. As with the rates for males increases were recorded in all States during the next eight years, and the weighted average rate for Australia at 31st December, 1942, had advanced by 20s. 11d. per week over that ruling on 31st December, 1933, and was 1.2 per cent. above the

average at 31st December, 1930. The highest weighted average rate for Australia was recorded during the quarter ended 31st December, 1942, namely, 64s. 4d. per week.

(v) *Adult Females—Industrial Groups.* The following table shows the weighted average weekly rates of wage payable in Australia to adult female workers in the industrial groups in which they are mainly employed, and in all groups combined.

WAGE RATES OF ADULT FEMALES.

WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK AND INDEX-NUMBERS OF WAGE RATES IN EACH INDUSTRIAL GROUP.

Date.	Industrial Group.					All Groups.
	III. Food, Drink, etc.	IV. Clothing, Boots, etc.	I., II., V., and VI. All Other Manufacturing.	XIII. Domestic, etc.(a)	XIV. Miscel- laneous.	
RATES OF WAGE.						
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
31st December, 1938..	47 1	49 9	50 6	52 11	54 6	51 3
" " 1939..	48 9	50 9	51 11	54 5	56 8	52 8
" " 1940..	50 0	52 6	53 8	55 10	57 11	54 3
" " 1941..	53 5	57 4	58 0	58 9	60 7	58 2
31st March, 1942 ..	54 1	59 5	59 6	59 9	60 10	59 2
30th June, 1942 ..	55 8	60 9	61 5	60 6	62 0	60 10
30th September, 1942	57 5	61 3	62 3	61 8	63 0	61 7
31st December, 1942..	59 8	63 11	64 7	63 4	67 1	64 4

INDEX-NUMBERS.

(Base: Weighted Average for Australia (27s. 2d.), 30th April, 1914 = 1,000.)

31st December, 1938..	1,732	1,831	1,859	1,947	2,004	1,887
" " 1939..	1,795	1,869	1,910	2,003	2,085	1,938
" " 1940..	1,841	1,932	1,975	2,056	2,132	1,996
" " 1941..	1,967	2,110	2,134	2,163	2,229	2,141
31st March, 1942 ..	1,991	2,188	2,191	2,198	2,239	2,178
30th June, 1942 ..	2,049	2,235	2,261	2,228	2,283	2,238
30th September, 1942	2,112	2,255	2,292	2,269	2,319	2,268
31st December, 1942..	2,195	2,354	2,378	2,332	2,468	2,368

(a) Includes the value of board and lodging, where supplied.

During 1942 the rate of wage for female employees in each industrial group showed an increase—IV. (Clothing, etc.), 6s. 11d. per week; I., II., V., VI. (All Other Manufacturing), 6s. 7d. per week; XIV. (Miscellaneous), 6s. 6d. per week; III. (Food, etc.), 6s. 3d. per week; and XIII. (Domestic, etc.), 4s. 7d. per week. The weighted average for all groups increased by 6s. 2d. per week.

3. *Relative Hours of Labour and Hourly Rates of Wage, 1938 to 1942.* (i) *General.* The rates of wage referred to in preceding paragraphs are the minima payable for a full week's work. The number of hours constituting a full week's work differs, however, in many instances between various trades and occupations in each State, and between the same trades and occupations in the several States. To secure what may be for some other purposes a better comparison, the results in the preceding paragraphs are reduced to a common basis, namely, the rate of wage per hour. Particulars as at the end of the years 1938 to 1942 are given in the following table, for males and females separately in each State. These particulars relate to (a) the weighted average nominal weekly

wage; (b) the weighted average number of working hours constituting a full week's work; and (c) the weighted average hourly wage. The weighted average weekly wage relates to all industrial groups combined, and includes the value of board and lodging where supplied in land occupations, and the value of victualling and accommodation where supplied in marine occupations, whereas the number of working hours and the hourly wage relate to all industrial groups other than Groups XI. (Shipping), and XII. (Agricultural, Pastoral, etc.). Many of the occupations included in these groups are of a casual or seasonal nature, and the hours of labour in the agricultural and dairying industry are not generally regulated either by awards or determinations of industrial tribunals or otherwise, hence the necessary data for the computation of the average number of working hours are not available.

The general effect of reducing the rates of wages to a common basis (i.e., per hour) is to eliminate on comparison any apparent difference between the several States which may be due to unequal working time.

(ii) *Adult Males and Females.* Particulars of the weekly and hourly wages and hours of labour for adult males and females at the close of the last five years are given in the table hereunder :—

### WEEKLY AND HOURLY WAGES AND HOURS OF LABOUR OF ADULT WORKERS.

31st December—		Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
MALE WORKERS.									
1938 ..	..	Weekly Wage (a) ..	95/0	91/2	95/10	87/1	99/1	88/5	93/5
		Working Hours (b) ..	44.01	45.85	43.67	46.31	44.33	46.00	44.82
		Hourly Wage (b) ..	2/3	2/0½	2/3	1/10½	2/4	1/11½	2/1½
1939 ..	..	Weekly Wage (a) ..	96/7	93/5	97/5	88/11	100/6	89/5	95/3
		Working Hours (b) ..	43.92	44.61	43.46	45.83	44.33	45.33	44.29
		Hourly Wage (b) ..	2/3½	2/1½	2/3½	1/11½	2/4	2/0	2/2½
1940 ..	..	Weekly Wage (a) ..	103/7	98/11	100/5	94/6	106/8	94/4	101/1
		Working Hours (b) ..	43.70	44.28	43.46	45.23	44.09	44.92	44.04
		Hourly Wage (b) ..	2/4½	2/2½	2/3½	2/5	2/5	2/1½	2/3½
1941 ..	..	Working Wage (a) ..	108/8	106/4	105/9	101/3	112/5	100/2	107/0
		Working Hours (b) ..	43.68	44.12	43.43	44.49	43.13	44.42	43.83
		Hourly Wage (b) ..	2/5½	2/5	2/5½	2/3½	2/7½	2/3	2/5½
1942 ..	..	Weekly Wage (a) ..	118/5	117/8	112/6	110/10	119/5	109/7	116/6
		Working Hours (b) ..	43.52	43.94	43.32	44.25	43.11	43.51	43.65
		Hourly Wage (b) ..	2/8½	2/8½	2/7½	2/6	2/9½	2/6½	2/8

### FEMALE WORKERS.

1938 ..	..	Weekly Wage ..	51/10	50/7	53/6	47/9	54/4	49/8	51/3
		Working Hours ..	43.88	44.63	44.03	45.96	45.38	45.10	44.44
		Hourly Wage ..	1/2½	1/1½	1/2½	1/0½	1/2½	1/1½	1/1½
1939 ..	..	Weekly Wage ..	53/3	51/9	55/2	49/7	55/8	50/8	52/8
		Working Hours ..	43.88	44.42	44.01	45.96	45.38	45.10	44.36
		Hourly Wage ..	1/2½	1/2	1/3	1/1	1/2½	1/1½	1/2½
1940 ..	..	Weekly Wage ..	54/9	53/5	56/0	52/1	57/6	53/1	54/3
		Working Hours ..	43.88	44.19	44.01	45.47	44.00	44.00	44.15
		Hourly Wage ..	1/3	1/2½	1/3½	1/1½	1/3½	1/2½	1/2½
1941 ..	..	Weekly Wage ..	57/11	58/4	59/6	55/5	60/4	56/7	58/2
		Working Hours ..	43.88	44.19	44.00	44.00	44.00	44.00	44.03
		Hourly Wage ..	1/3½	1/3½	1/4½	1/3	1/4½	1/3½	1/3½
1942 ..	..	Weekly Wage ..	63/10	64/11	66/4	60/3	64/2	61/3	64/4
		Working Hours ..	43.88	44.19	44.00	44.00	44.00	44.00	44.03
		Hourly Wage ..	1/5½	1/5½	1/6	1/4½	1/5½	1/4½	1/5½

(a) Weighted average weekly rate in all industrial groups combined. (b) Weighted average working hours per week, and computed hourly rates of wage for all industrial groups excepting Groups XI. (Shipping, etc.), and XII. (Agricultural, Pastoral, etc.). Working hours have not been generally regulated by industrial tribunals for occupations classified in industrial groups XI. and XII.



(iii) *Index-Numbers.* The downward tendency in hours of labour for Australia commenced in the December quarter of 1924, when the weighted averages were 46.66 for males and 46.02 for females, and, excepting for slight increases in 1929 and 1930, the reduction has continued. During 1942, there was an increasing tendency towards reduction in those States in which the 44-hour week had not become the standard. The weighted averages for Australia at 31st December, 1942, were 43.65 for males and 44.03 for females. The effect of changes in hours of labour on the hourly rate of wage as compared with the general increase in the weekly wage is readily seen from the comparative index-numbers given in the following table:—

WEEKLY AND HOURLY INDEX-NUMBERS OF WAGE RATES : ADULT WORKERS.

(Base : *Weighted Average for Australia, 30th April, 1914\** = 1,000.)

31st December—	Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
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MALE WORKERS.

1938..	..	{ Weekly Wage ..	1,725	1,656	1,740	1,581	1,799	1,605	1,696
		{ Hourly Wage (a) ..	1,935	1,741	1,934	1,638	1,968	1,671	1,840
1939..	..	{ Weekly Wage ..	1,754	1,696	1,768	1,614	1,825	1,624	1,729
		{ Hourly Wage (a) ..	1,963	1,834	1,979	1,692	2,001	1,717	1,903
1940..	..	{ Weekly Wage ..	1,808	1,761	1,775	1,686	1,888	1,682	1,781
		{ Hourly Wage (a) ..	2,038	1,920	1,986	1,796	2,080	1,805	1,973
1941..	..	{ Weekly Wage ..	1,913	1,896	1,847	1,821	2,000	1,802	1,893
		{ Hourly Wage (a) ..	2,138	2,071	2,092	1,956	2,240	1,938	2,098
1942..	..	{ Weekly Wage ..	2,147	2,117	2,000	2,037	2,134	1,964	2,100
		{ Hourly Wage (a) ..	2,339	2,302	2,232	2,153	2,381	2,165	2,295

FEMALE WORKERS.

1938..	..	{ Weekly Wage ..	1,907	1,862	1,969	1,758	2,000	1,828	1,887
		{ Hourly Wage ..	2,134	2,050	2,196	1,878	2,164	1,991	2,084
1939..	..	{ Weekly Wage ..	1,960	1,906	2,031	1,826	2,049	1,866	2,038
		{ Hourly Wage ..	2,193	2,107	2,267	1,952	2,217	2,032	2,145
1940..	..	{ Weekly Wage ..	2,016	1,966	2,060	1,916	2,116	1,954	1,996
		{ Hourly Wage ..	2,256	2,184	2,298	2,069	2,361	2,181	2,220
1941..	..	{ Weekly Wage ..	2,133	2,148	2,191	2,038	2,220	2,082	2,141
		{ Hourly Wage ..	2,387	2,387	2,444	2,274	2,477	2,324	2,387
1942..	..	{ Weekly Wage ..	2,350	2,391	2,442	2,216	2,361	2,255	2,368
		{ Hourly Wage ..	2,630	2,657	2,726	2,473	2,636	2,517	2,642

(a) See footnote to following table.

\* Approximate Weekly Rates—M = 55/1; F = 27/2. Hourly Rates—M = 1/2; F = 0/6½.

4. **Weighted Average Nominal Weekly Hours of Labour, Adult Males.**—The following table shows the weighted average nominal hours of labour (excluding overtime) in a full working week for adult male workers in each State and Australia at 31st December, 1938 to 1942.

## HOURS OF LABOUR.

## INDEX-NUMBERS OF WEEKLY HOURS OF LABOUR OF ADULT MALES.

NOTE.—Index-numbers are based on the average hours of labour for Australia at 30th April, 1914 (48.93) = 1,000. Overtime is excluded.

31st December—	Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
1938..	{ Weighted average weekly hours of labour (a) ..	44.01	45.75	43.67	46.31	44.34	46.00	44.82
	{ Index-numbers ..	899	935	893	946	906	940	916
1939..	{ Weighted average weekly hours of labour (a) ..	43.92	44.61	43.46	45.83	44.33	45.33	44.29
	{ Index-numbers ..	898	912	888	937	906	926	905
1940..	{ Weighted average weekly hours of labour (a) ..	43.70	44.28	43.46	45.23	44.09	44.92	44.04
	{ Index-numbers ..	893	905	888	924	901	918	900
1941..	{ Weighted average weekly hours of labour (a) ..	43.68	44.12	43.43	44.49	43.13	44.42	43.83
	{ Index-numbers ..	893	902	888	909	881	908	896
1940..	{ Weighted average weekly hours of labour (a) ..	43.52	43.94	43.32	44.25	43.11	43.51	43.65
	{ Index-numbers ..	889	898	885	904	881	889	892

(a) Weighted average working hours per week for all industrial groups excepting Groups XI. (Shipping), and XII. (Agricultural, Pastoral, etc.). Working hours have not been generally regulated by industrial tribunals for occupations classified in Industrial Groups XI. and XII.

5. Nominal and Effective Wages.—(i) *General*. Wages are said to be *nominal* when they represent the actual amounts of moneys received in return for labour, and are described as *effective* or *real* when expressed in terms of their equivalent purchasing power, that is, their purchasing power over some definite composite unit or regimen the cost of which can be ascertained at different times. The relation between nominal and *effective* or *real* wages was discussed at some length in *Labour Report* No. 6, and was also referred to in *Labour Report* No. 11.

Since it is possible to measure purchasing power over more than one composite unit or regimen it is equally possible to convert any given nominal wage series into more than one series of effective or real wages. Prior to 1936 it was the practice of this Bureau to compute effective wage index-numbers by dividing the nominal wage index-numbers by the corresponding retail price index-numbers for food, groceries and rent of all houses ("A" series). While wage rates were generally varied on the basis of the "A" series index-numbers there was a good deal to be said for this procedure. When the Commonwealth Court abandoned the "A" series, the merits of the "C" series for deflating nominal wage rates were strengthened. The "C" series covers food, groceries, rent for four and five-roomed houses, clothing and miscellaneous household requirements. As the compilation of the "A" series was discontinued after the June quarter of 1938, real wages to the end of 1937 are measured in terms of their purchasing power over both the "A" series regimen and the "C" series regimen in the following tables, and over the "C" series only for the subsequent years.

(ii) *Nominal Weekly Wage Index-numbers 1901 to 1942—States*. The following table shows for the period 1901 to 1942 the weighted average nominal weekly rates of wage payable for adult males in each State, the weighted average rate for Australia in 1911 being taken as the base (= 1,000). These results are based generally upon rates of wage prevailing in the capital city of each State, but in certain industries, such as mining, rates are necessarily taken for places other than the capital cities. The index-numbers for 1901 and 1911 are based on rates current at the end of December, annual averages

not being available. For 1914 and subsequent years, however, the index-numbers are based on the average rates current at the end of the four quarters of each year:—

**NOMINAL WAGE INDEX-NUMBERS : ADULT MALES.**

(Base : Weighted Average Wage for Australia, 1911 = 1,000.)

State.	1901.	1911.	1914.	1921.	1929.	1936.	1937.	1938.	1939.	1940.	1941.	1942.
New South Wales	858	1,003	1,093	1,862	2,012	1,654	1,723	1,829	1,874	1,920	2,024	2,210
Victoria ..	796	985	1,062	1,803	1,964	1,583	1,665	1,755	1,808	1,865	1,984	2,172
Queensland ..	901	997	1,035	1,879	1,976	1,728	1,774	1,854	1,885	1,903	1,981	2,091
South Australia ..	819	1,013	1,061	1,697	1,891	1,533	1,608	1,688	1,725	1,764	1,897	2,065
Western Australia	1,052	1,152	1,223	1,832	1,960	1,730	1,790	1,876	1,956	1,999	2,106	2,215
Tasmania ..	719	799	1,027	1,745	1,840	1,610	1,656	1,718	1,738	1,787	1,895	2,057
Australia ..	848	1,000	1,081	1,826	1,972	1,638	1,707	1,799	1,846	1,889	1,997	2,164

(iii) *Effective or Real Wage Index-numbers in each State, 1901-1942.* In obtaining the effective wage index-numbers in the following table the nominal wage index-numbers shown above have been divided by the corresponding retail price index-numbers for the capital city and multiplied by 1,000.

The index-numbers for 1901 and 1911 which are based on nominal rates of wage current at the end of December may be taken as substantially accurate, since the movement in wages during the course of any one year prior to 1914 was comparatively slight.

**EFFECTIVE OR REAL WAGE INDEX-NUMBERS FOR ADULT MALES (FULL WORK).**

Measured in terms of purchasing power over the "A" series regimen.

(Base : Weighted Average Real Wage in Australia in 1911 = 1,000)

State.	1901.	1911.	1914.	1921.	1929.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	
New South Wales	..	961	973	906	1,079	1,050	1,160	1,150	1,138	1,101	1,095	1,090	1,107
Victoria ..	..	915	1,037	961	1,038	1,084	1,162	1,126	1,139	1,114	1,092	1,075	1,099
Queensland	..	1,172	1,090	1,038	1,244	1,220	1,345	1,376	1,417	1,377	1,323	1,261	1,237
South Australia ..	..	948	957	929	1,027	1,067	1,178	1,133	1,152	1,144	1,149	1,143	1,151
Western Australia	..	1,024	1,023	1,070	1,139	1,143	1,232	1,212	1,246	1,221	1,260	1,251	1,253
Tasmania	..	827	838	942	977	1,064	1,104	1,067	1,094	1,086	1,099	1,094	1,088
Australia ..	..	964	1,000	948	1,076	1,082	1,185	1,168	1,178	1,148	1,135	1,121	1,133

Since the "C" series index-numbers were not compiled for periods prior to November, 1914, it has been assumed for the purpose of the following table that fluctuations between 1911, the base of the table, and 1914 in the "C" series would have been similar to the fluctuations observed in the "A" series.

**EFFECTIVE OR REAL WAGE INDEX-NUMBERS FOR ADULT MALES (FULL WORK).**

Measured in terms of purchasing power over the "C" series regimen.

(Base : Weighted Average Real Wage in Australia in 1911 = 1,000.)

State.	1911.	1914.	1921.	1929.	1934.	1935.	1936.	1937.	1938.	1939.	1940.	1941.	1942.	
New South Wales ..	..	..	925	1,073	1,130	1,157	1,153	1,150	1,168	1,207	1,207	1,187	1,187	1,204
Victoria ..	..	..	954	1,084	1,164	1,146	1,134	1,131	1,155	1,180	1,180	1,167	1,187	1,190
Queensland ..	..	..	1,022	1,227	1,290	1,366	1,338	1,296	1,277	1,311	1,306	1,264	1,240	1,221
South Australia ..	..	..	914	1,034	1,099	1,091	1,097	1,101	1,128	1,146	1,147	1,136	1,158	1,159
Western Australia ..	..	..	1,043	1,096	1,152	1,177	1,221	1,219	1,242	1,281	1,308	1,293	1,279	1,259
Tasmania ..	..	..	902	984	1,108	1,109	1,115	1,128	1,141	1,167	1,153	1,139	1,142	1,150
Australia ..	1,000	948	1,087	1,151	1,173	1,169	1,162	1,178	1,209	1,211	1,190	1,194	1,196	



In the table above, the effective wage index-numbers are computed to the one base, that of Australia for 1911. As the index-numbers are comparable in all respects, comparisons may be made as to the increase or decrease in the effective wage index-number for any State over any period of years.

(iv) *Effective or Real Wage Index-numbers in Australia, 1901-1942.* In the following table similar index-numbers are given for Australia as a whole. These are obtained by dividing the nominal wage index-numbers for Australia by the corresponding retail price index-numbers for the Six Capital Cities and multiplying by 1,000.

# NOMINAL AND EFFECTIVE OR REAL WAGE INDEX-NUMBERS (FULL WORK).

(Base : Weighted Average Real Wage in Australia in 1911 = 1,000.)

Year.			Nominal Weekly Wage Index- numbers.	Retail Price Index-numbers.		Effective or Real Wage Index-numbers, i.e., Relative Purchasing Power over Regimen of—	
				"A" Series (Food, Groceries and Rent of All Houses).	"C" Series (All Items).	"A" Series.	"C" Series.
1901	..	..	848	880	..	964	..
1910	..	..	955	970	..	985	..
1911	..	..	1,000	1,000	(1,000)	1,000	(1,000)
1916	..	..	1,144	1,324	1,319	864	867
1917	..	..	1,226	1,318	1,406	930	872
1918	..	..	1,270	1,362	1,501	932	846
1919	..	..	1,370	1,510	1,695	907	808
1920	..	..	1,627	1,785	1,935	911	841
1921	..	..	1,826	1,697	1,680	1,076	1,087
1922	..	..	1,801	1,600	1,619	1,126	1,112
1923	..	..	1,805	1,700	1,664	1,062	1,085
1924	..	..	1,840	1,681	1,637	1,095	1,124
1925	..	..	1,861	1,722	1,654	1,081	1,125
1926	..	..	1,914	1,786	1,677	1,072	1,141
1927	..	..	1,946	1,766	1,662	1,102	1,171
1928	..	..	1,963	1,760	1,675	1,115	1,172
1929	..	..	1,972	1,822	1,713	1,082	1,151
1930	..	..	1,939	1,683	1,618	1,152	1,198
1931	..	..	1,752	1,479	1,448	1,185	1,210
1932	..	..	1,639	1,403	1,377	1,168	1,190
1933	..	..	1,584	1,345	1,335	1,178	1,187
1934	..	..	1,590	1,385	1,355	1,148	1,173
1935	..	..	1,612	1,420	1,380	1,135	1,160
1936	..	..	1,638	1,461	1,409	1,121	1,162
1937	..	..	1,707	1,507	1,448	1,133	1,178
1938	..	..	1,799	(a)	1,488	(a)	1,209
1939	..	..	1,846	(a)	1,526	(a)	1,211
1940	..	..	1,889	(a)	1,588	(a)	1,190
1941	..	..	1,997	(a)	1,673	(a)	1,194
1942	..	..	2,164	(a)	1,809	(a)	1,196

(a) Not available.

NOTE.—For years prior to 1914, the nominal wage index-numbers relate to the end of the year only, but from 1914 onwards these figures, in addition to those for retail prices, are averages for the whole year.

### § 3. Basic Wages in Australia.

1. **General.**—Basic wages in Australia are fixed by various industrial tribunals operating under Commonwealth and State Arbitration Acts, and are varied from time to time according to changes in cost of living, constitution of the family unit, etc. In the industrial legislation of New South Wales, Queensland, South Australia and Western Australia, provision is made for the tribunals appointed under the Acts to determine the basic rates of wage to be paid to adult unskilled workers. In Tasmania provision for the declaration of a basic rate of wage is not included in the industrial Acts in force. The Wages Board system operates in this State, and each Wages Board determines the rate of wage to be paid to the unskilled worker when the determination for an industry or calling is under review. In Victoria, however, the same Wages Board system exists but by amendments of the Factories Act, operative from 17th October, 1934, Wages Boards are obliged to adopt the same basic wage as that determined by the Commonwealth Arbitration Court for similar industries. As the power of the Commonwealth Arbitration Court is limited by the Constitution to the settlement, by conciliation and arbitration, of industrial disputes extending beyond the limits of any one State, no similar provision is to be found in the Commonwealth Conciliation and Arbitration Act. In practice, the Court does declare a Commonwealth basic wage and uses the wage so declared as a basis for all awards made by it in the exercise of its jurisdiction. That is, upon a new basic wage being declared, the awards made in the settlement of all interstate industrial disputes are re-opened and amended accordingly. In addition to the "basic" wage, these tribunals also determine what is known as the "secondary" wage—"the extra payment to be made for trained skill or other exceptional qualities necessary for an employee exercising the functions required."\* The term "minimum" wage, on the other hand, is used to express the lowest rate payable in a particular industry, and is either equal to, or greater than, the "basic" wage.

2. **The Commonwealth Basic Wage.**—(i) *General.* The doctrine of a basic wage was propounded as far back as 1890 by Sir Samuel Griffith, Premier of Queensland, and the same principle was enunciated in the New South Wales Arbitration Court in somewhat similar terms by Mr. Justice Heydon in 1905. In spite, however, of these pronouncements and the fact that wage-fixing tribunals had been in operation as early as 1896 (in the State of Victoria), it was not until 1907 that the first basic wage, as such, was declared by a Court in Australia, and was made by Mr. Justice Higgins, President of the Commonwealth Court of Conciliation and Arbitration. The wage declared was defined as the lowest wage which can be paid to an unskilled labourer on the basis of "the normal needs of an average employee regarded as a human being living in a civilized community."† This declaration was made by way of an order in terms of Section 2 (d) of the Excise Tariff 1906 in the matter of an application by H. V. McKay, of the Sunshine Harvester Works, Victoria, from which was derived the title of the "Harvester Wage" by which it is popularly known. The rate of wage declared in this case was 7s. per day or £2 2s. per week for Melbourne, the amount considered reasonable for "a family of about five."‡ The constituent parts of this amount were £1 5s. 5d. for food, 7s. for rent, and 9s. 7d. for all other expenditure.

The "Harvester" basic rate was adopted by the Commonwealth Arbitration Court for incorporation in its awards, and practically the same rates continued until 1913, when the Court took cognizance of the retail price index-numbers, covering food and groceries and rent of all houses ("A" Series), for the 30 more important towns of Australia, which had been published by the Commonwealth Statistician for the first time in the preceding year. These index-numbers had been taken back to 1901, with the year 1911 as base, and disclosed not only considerable percentage increases since 1907, but also large disparities in the relative purchasing power of money in the various towns. The basic rates for towns were thereafter fixed on their respective index-numbers, taking the index-number 875 for Melbourne for the year 1907 as being equivalent to the

\* Mr. Justice Higgins—*A New Province of Law and Order*.

† *Ibid.*

‡ See page 473 for Court's interpretation in 1940 Basic Wage Inquiry of the "family unit".

"Harvester" rate of 42s. per week, or the base of the table 1,000 as being equivalent to 48s. per week. Exceptions were made in the case of many country towns, where certain "loadings" were applied to counterbalance their lower index-numbers due to cheaper rentals.\*

In 1922 an amount known as the "Powers' 3s."† was added as a general "loading" to the weekly wage for the purpose of securing to the worker during a period of rising prices the full equivalent of the "Harvester" standard. In the same year the system was instituted of making regular quarterly adjustments of the basic wage to accord with variations in purchasing power as disclosed by the "A" Series retail price index-numbers, and of basing the adjustments on the index-number for the quarter in place of that for the previous calendar year or the year ended the preceding quarter.

The Commonwealth Conciliation and Arbitration Act provides that the "basic" wage, or any alteration thereof including the principles on which it is computed, together with any variation or interpretation of any award involving any such alteration, shall be considered by a Court constituted by the Chief Judge and not less than two other Judges, and must be approved by a majority of the members of that Court. By a judgment of the High Court on 21st April, 1933, the "basic" wage is taken to mean for the foregoing purpose, not only the "Harvester" wage but any "loadings" forming part of the primary wage of an unskilled labourer. A "loading" is defined as an addition to the "basic" wage as compensation for some peculiar condition of labour or environment, and not by way of "margin for skill". The wage payable for skilled labour is assessed on the basis of the "basic" wage, including "loadings."

The adequacy or otherwise of the "Harvester" standard has been the subject of much discussion, the author of the judgment himself urging on several occasions the need for its review. The abnormal conditions during and for some time after the War of 1914-19 hindered such a review which was regarded as less urgent by reason of the fact that wages throughout Australia were being automatically adjusted to changes in retail prices. A Royal Commission (referred to later) was appointed in 1920 to assess a basic wage, but its recommendations were not carried out.

No change was made in the method of fixation and adjustment of the basic wage until the onset of the depression, which began to be felt severely during 1930. Applications were then made to the Court by employers for some greater measure of reduction of wages than that afforded by the automatic adjustments to falling retail prices. An account of the proceedings which resulted in the Court reducing all wages under its jurisdiction by 10 per cent. from 1st February, 1931, is given in *Labour Report* No. 23, page 74. Reference is also made to the Court's refusal in June, 1932, and May, 1933, to remove this special reduction.

(ii) *Basic Wage Inquiry, 1934.* The "Harvester" standard, adjusted to retail price variations, continued as the theoretical basis of the wage of the Commonwealth Court until 30th April, 1934, when it was superseded by a judgment delivered on 17th April, 1934, full particulars of which appear in *Official Year Book* No. 29, 1936, page 545. The basic wage declared on this occasion (subsequently referred to as the "Needs" Basic Wage 1934") was as follows for the six capital cities:—

				<i>s. d.</i>								<i>s. d.</i>			
Sydney	..	..	67	0	Adelaide	..	..	64	0						
Melbourne	..	..	64	0	Perth	..	..	66	0						
Brisbane	..	..	61	0	Hobart	..	..	67	0						

Six Capital Cities, 65s. od.

\* As these indexes covered only about 60 per cent. of household expenditure, a low index due to low rentals would wrongly presume low costs in the remaining uninvestigated 40 per cent. of household expenditure and *vice versa*.

† Awarded by Mr. Justice Powers in the Gas Workers' case.



The following is a comparison for the capital cities of the basic rates granted by the judgment and those ruling under previous practices of the Court :—

## COMPARISON OF BASIC RATES AWARDED FOR CAPITAL CITIES.

City.	New Rates Awarded 1st May, 1934; "C" Series.	Rates being paid prior to 1st May, 1934.(a)		Increase or Decrease.		
		Under "D" Series less 10 per cent. "Cut".	Under "A" Series (Full).	Over "D" Series.	Over "A" Series (Full).	Over "A" Series less 10 per cent. "Cut".
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Sydney ..	67 0	66 11	72 0	0 1	-5 0	+2 2
Melbourne ..	64 0	63 4	67 6	0 8	-3 6	+3 3
Brisbane ..	61 0	59 4	62 0	1 8	-1 0	+5 2
Adelaide ..	64 0	60 2	63 0	3 10	+1 0	+7 4
Perth ..	66 0	59 3	64 0	6 9	+2 0	+8 5
Hobart ..	67 0	64 10	70 0	2 2	-3 0	+4 0
Six Capitals	65 0	63 9	68 0	1 3	-3 0	+3 10

(a) Calculated to nearest 6d., and including "Powers' 3s." or its equivalent.

NOTE.—The vast majority of workers affected were being paid the rates shown under the "D" Series Index of Retail Prices—a combination of the "A" and "C" Series Indexes.

The 10 per cent. special reduction in wages referred to above ceased to operate upon the introduction of the new rates, and the basis of the periodical adjustments to retail price variations was transferred from the "A" and the "D" Series to the "C" Series of Index-numbers. The latter Series covers Food and Groceries; Rent of 4-roomed and 5-roomed Houses; Clothing; Fuel; Light; Household Utensils; Household Drapery; Fares; and other Miscellaneous household requirements. The base of the table (1,000) was taken by the Court as equal to 81s. per week. This gave the above rates for the capital cities, which are proportionate to their respective index-numbers. In effect, the new rate for the Six Capital Cities was the same as that previously paid under the "A" Series, without the "Powers' 3s.," and without the 10 per cent. reduction. Certain towns gained and others lost in comparison with rates under the "A" Series, owing to the different relationship of towns under the "A" and the "C" Series.

(iii) *Basic Wage Inquiry, 1937.* In May, 1937, the Commonwealth Court heard an application by the combined unions for an increase in the basic wage. The unions asked that the equivalent of the base (1,000) of the "C" Series Index be increased from 81s. to 93s. which on current index-numbers would have represented an average increase of about 10s. per week. The hearing extended from 10th May to 4th June, 1937, and the Court delivered judgment on 23rd June. The chief features of the judgment were:—

(a) Various amounts were added to the basic wage not as an integral, and therefore adjustable, part of that wage, but as "loadings" on the rates that would have been payable under the "shilling table" as determined by the 1934 judgment. The latter

was referred to in the judgment as the "needs" portions of the total resultant basic wage. The "loadings" and resultant "total basic wages" for the six capital cities were as follows :—

City.				"Needs" Basic Wage.	"Loading."	Total Basic Wage.
				s. d.	s. d.	s. d.
Sydney ..	..	..	..	72 0	6 0	78 0
Melbourne ..	..	..	..	69 0	6 0	75 0
Brisbane ..	..	..	..	68 0	6 0	74 0
Adelaide ..	..	..	..	68 0 (a)	4 0	72 0
Perth ..	..	..	..	70 0 (a)	4 0	74 0
Hobart ..	..	..	..	70 0 (b)	4 0	74 0
Six Capitals .. ..				70 0	5 0	75 0

(a) An additional 1s. was actually being paid under the "2s. minimum adjustment" provision.

(b) One shilling less was being paid under the "2s. minimum adjustment" provision.

The above were not to apply to railway employees, to whom the Court granted "loadings" of 5s. in New South Wales and Victoria, and 3s. in South Australia and Tasmania. Workers in the provincial towns were to receive "loadings"—6s. in New South Wales, Victoria and Queensland; and 4s. in South Australia, Western Australia and Tasmania. Wages based on "combination" index-numbers covering 4, 5 or 6 capital cities, or the 30 towns, would receive a "loading" of 5s. per week. The Maritime Workers were granted a "loading" of 21s. 6d. per month, and the Pastoral Workers received increases proportionate to the increase of the flat basic rate, from 68s. to 77s. in respect of the basis of piece work rates. Station hands received an increase of 3s. per week.

The "loadings" came into operation in two instalments, viz., from the beginning of the first pay-periods commencing in July and October, 1937.

The Maritime, Pastoral and Gas Workers' increases were to become fully operative in the first pay period in July.

(b) The former proviso that no adjustment of wages should take place unless the amount of variation reached at least 2s. was rescinded in favour of minimum variations of 1s. per week.

(c) The general policy laid down in the previous judgment in regard to rates for country towns was retained, with the exception that the rates for Geelong and Warnambool were made the same as those for Melbourne.

(d) The basis of the adjustment of wages in accordance with the variations shown by retail price index-numbers was transferred from the "C" Series to a special "Court" Series based upon the "C" Series.

(e) Female and junior rates were left for adjustment by individual Judges when dealing with specific awards.

The main parts of the judgment are reprinted in Official Year Book No. 30.

(iv) "*Lag*" in Adjustments. The Commonwealth Court on 19th December, 1939, heard an application by the unions that the date of adjustment of the basic wage in accordance with the variations in the "Court" Series of index-numbers be brought nearer to the period upon which the variation was based. In a judgment delivered on the same day, the Court directed that such adjustments be made one month earlier. The effect, therefore, was to make future adjustments operative from the beginning of the first pay-period to commence in a February, a May, an August or a November.

(v) *Basic Wage Inquiry*, 1940. On 5th August, 1940, the Full Court commenced the hearing of an application by the combined unions for an increase in the existing basic wage by raising the value of 1,000 (the base of the "C" Series index upon which the "Court" Series are based) from 81s. to 100s. per week, and the abolition of the present "Prosperity" loadings, which would be regarded as incorporated in the new rate mentioned. The hearing was interrupted for a period of ten weeks owing to the serious illness of the Chief Judge (the Hon. Sir George S. Beeby), but was completed on 28th November, 1940. Judgment was delivered on 7th February, 1941, wherein the Court unanimously refused to grant any increase, and decided that the application should not be dismissed but stood over for further consideration after 30th June, 1941. The application was refused mainly owing to the uncertainty of the economic outlook under existing war conditions.

In regard to the popular idea that the basic wage of the Commonwealth Court of Conciliation and Arbitration was identified with a specific family unit, the Chief Judge made the following statements to clarify the position: "The Court has always conceded the 'needs' of an average family should be kept in mind in fixing a basic wage. But it has never as the result of its own inquiry specifically declared what is an average family or what is the cost of a regimen of food, clothing, shelter and miscellaneous items necessary to maintain it in frugal comfort, or that a basic wage should give effect to any such finding. In the end economic possibilities have always been the determining factor . . . . What should be sought is the independent ascertainment and prescription of the highest basic wage that can be sustained by the total of industry in all its primary, secondary and ancillary forms. That, no doubt, is the object, but the adoption of something like the real average family as the unit to be provided for is not without its use in the attainment of that object. There is no clear means of measuring the general wage-paying capacity of the total industry of a country. All that can be done is to approximate, and one of the methods of approximation is to find out the actual wage upon which well-situated labourers are at the time maintaining the average family unit. We may be pardoned for saying that Mr. Justice Higgins very wisely used this criterion in the Harvester case. Moreover, if the average-sized families of such well-situated labourers have become accustomed to enjoy, and do actually enjoy, a certain standard of living in our community, it may reasonably be assumed that such a standard for all labourers is probably not beyond the capacity of industry in general to provide. Therefore in determining the amount of a living or basic wage there is sound economic warrant for the ascertainment of the real average family unit and of the cost of providing something like the standard which such families of well-employed labourers have already reached. But obviously, if the real average family unit is departed from, or a standard is sought for the likely maintenance of which experience gives no reason to hope, then an unrealizable wage-level may be ordained . . . . It may be that in the light of past experience the Court should conduct a specific inquiry as to the cost of living of an average family, but under war conditions, such an inquiry would be futile. More than ever before wage fixation is controlled by the economic outlook".

The Chief Judge further stated: "I was impressed by the new evidence and argument as to the inadequacy of the earnings of the lower-paid wage earners with families. On our accepted standards of living, looking at it from the needs point of view only, I regard the present basic wage as adequate for a family unit of three persons, but think it offers only a meagre existence for a family unit of four. When the unit gets beyond four hardship is often experienced." He suggested that the more logical system would be to grade the basic wage according to family responsibilities and that, notwithstanding the increase in aggregate wages, the benefits resulting from a re-apportionment of national income to increase the wages of those with more than one dependent child would more than offset the inflationary tendency of provision for a comprehensive scheme of child endowment, and that if a scheme of this nature were established, as recently announced by the Commonwealth Government,\* future fixations of the basic wage would be greatly

\* Legislation covering a scheme to become operative on 1st July, 1941, was actually passed by the Commonwealth Parliament on 3rd April, 1941—see page 480 for details.



simplified. The other two Judges (O'Mara, J., and Piper, J.), in separate judgments, agreed with that of the Chief Judge, particularly in regard to the need for a child endowment scheme as a solution of the main problem.

(vi) *Current Commonwealth Basic Wage Rates.* The basic wage rates of the Commonwealth Court for adult males, including the "loadings" granted in 1937, operative from 1st February, 1944, are as follows:—

	s.	d.		s.	d.
New South Wales—			South Australia—		
Sydney ..	..	99 0	Adelaide ..	..	93 0
Newcastle (a) ..	..	99 0	Five Towns ..	..	93 0
Broken Hill ..	..	101 0			
Five Towns ..	..	98 0	Western Australia—		
			Perth ..	..	93 0
Victoria—			Kalgoorlie ..	..	100 0
Melbourne ..	..	97 0(b)	Geraldton ..	..	99 0
Geelong ..	..		Five Towns ..	..	94 0
Warrnambool ..	..				
Mildura ..	..		Tasmania—		
Yallourn ..	..	103 6(b)	Hobart ..	..	94 0
Five Towns ..	..	97 0	Launceston ..	..	91 0
			Queenstown ..	..	93 0
Queensland—			Five Towns ..	..	93 0
Brisbane ..	..	93 0			
Five Towns ..	..	93 0	Thirty Towns ..	..	96 0
			Six Capital Cities ..	..	96 0

(a) Based on Sydney.

(b) Based on Melbourne.

With the exception of those mentioned above, the rate for provincial towns is 3s. less than that of their respective capital cities. The rate for adult females—prescribed by the individual judges—is approximately 54 per cent. of the adult male rate.

3. *State Basic Wages.*—(i) *New South Wales.* The first determination under the New South Wales Industrial Arbitration Act of a standard living wage for adult male employees was made on 16th February, 1914, by the Court of Industrial Arbitration. The Board of Trade was established in 1918 with power to determine the living wage for adult male and female employees in the State; the Board made numerous declarations from 1918 to 1925, but ceased to function after the Industrial Arbitration (Amendment) Act 1926 established the Industrial Commission of New South Wales, which exercised the powers of the Board of Trade from 15th April, 1926.

The adult male rate was determined on the family unit of a man, wife and two children from 1914 to 1925; a man and wife only in 1927, with family allowances for dependent children; and a man, wife and one child in 1929, with family allowances for other dependent children. With the adoption in 1937 of the Commonwealth basic wage referred to below, however, the identification of a specified family unit with the basic wage disappeared.

Employees in rural industries are not covered by the rates shown in the following table; a living wage for rural workers of £3 6s. per week was in force for twelve months from October, 1921, and a rate of £4 4s. operated from June, 1927, to December, 1929, when the power of industrial tribunals to fix a living wage for rural workers was withdrawn.

The variations in the living wages determined by the industrial tribunals of New South Wales up to 27th April, 1937, are shown in the following table. Thereafter changes are made automatically in accordance with the procedure outlined in the next paragraph, and the latest current rate payable will be found in the table in sub-par. vi, page 478.

BASIC WAGE VARIATIONS IN NEW SOUTH WALES. (*State Jurisdiction.*)

Male.		Female.	
Date of Declaration.	Basic Wage per Week.	Date of Declaration.	Basic Wage per Week.
	£ s. d.		£ s. d.
16th February, 1914 ..	2 8 0	..	..
17th December, 1915 ..	2 12 6	..	..
18th August, 1916 ..	2 15 6	..	..
5th September, 1918 ..	3 0 0	17th December, 1918 ..	1 10 0
8th October, 1919 ..	3 17 0	23rd December, 1919 ..	1 19 0
8th October, 1920 ..	4 5 0	23rd December, 1920 ..	2 3 0
8th October, 1921 ..	4 2 0	22nd December, 1921 ..	2 1 0
12th May, 1922 ..	3 18 0	9th October, 1922 ..	1 19 6
10th April, 1923 ..	3 19 0	(a)	2 0 0
7th September, 1923 ..	4 2 0	.. ..	2 1 6
24th August, 1925 ..	4 4 0	.. ..	2 2 6
27th June, 1927 ..	4 5 0	.. ..	2 6 0
20th December, 1929 ..	4 2 6	.. ..	2 4 6
26th August, 1932 ..	3 10 0	.. ..	1 18 0
11th April, 1933 ..	3 8 6	.. ..	1 17 0
20th October, 1933 ..	3 6 6	.. ..	1 16 0
26th April, 1934 ..	3 7 6	.. ..	1 16 6
18th April, 1935 ..	3 8 6	.. ..	1 17 0
24th April, 1936 ..	3 9 0	.. ..	(b) 1 17 6
27th October, 1936 ..	3 10 0	.. ..	1 18 0
27th April, 1937 ..	(c) 3 11 6	.. ..	1 18 6

(a) Dates of declarations from 1923 were the same as those for male rate.

(b) Rate declared, £1 18s. 6d., but law amended to provide a rate for females at 54 per cent. of that for males.

(c) See below.

Following on the judgment of the Commonwealth Arbitration Court referred to on page 471, the Government of New South Wales decided to make the State Basic Wage accord with the Commonwealth rates ruling in the State, and secured an amendment of the Industrial Arbitration Act to give effect thereto. The Act (No. 9 of 1937) was passed on 7th October, 1937, and was to operate from the commencement of the first pay period in October, practically from 1st October, 1937. The general principles laid down by the Commonwealth Court were followed as closely as practicable, and provision was made for the automatic adjustment of wages in conformity with variations in retail prices as shown by the Commonwealth Court's "All Items" Retail Price Index-numbers, shortly known as the "Court" Series of Index-numbers. The Commonwealth Court's principle of treating the "prosperity loadings" as a separate and non-adjustable part of the total basic wage was adopted. The provisions of the main Acts for the periodic declaration of the living wage by the Industrial Commission were repealed, but the amending Act placed on the Commission the responsibility of altering all awards and agreements in conformity with the intentions of the new Act; to define boundaries within which the various rates are to operate; and to specify the appropriate "Court" Series retail price index-numbers to which they are to be related.

Compared with State adult basic wages of £3 11s. 6d. per week for males, and £1 18s. 6d. for females operative at the time, the alteration represented for males increases of 6s. 6d. in Sydney; 3s. 6d. in Country districts (with certain exceptions); and 4s. 6d. for railway and other Crown employees as defined by the Act. For females the increases were 54 per cent. of the foregoing, and amounted to 3s. 6d., 2s., and 2s. 6d., respectively.

The latest rates applicable in the metropolitan area from 1st November, 1943, are £4 19s. for males and £2 13s. 6d. for females.

The principle of supplementing wages by a payment in respect of dependent children under fourteen years of age was operative in New South Wales, since July, 1927, until superseded by the Commonwealth Government Scheme operative from 1st July, 1941, and a brief account of the main features of the system appears in § 4, par. 2 hereafter.

(ii) *Victoria and Tasmania.* A State basic rate of wage is not declared in Victoria and Tasmania. In these States the Wages Board system of wage fixation is in

operation, and each Board determines the minimum rate of wage to be paid in the industry or calling under review. In the majority of cases the practice of the Commonwealth Arbitration Court of adjusting wages in accordance with variations in retail prices has been followed in the past by these bodies. In the case of Victoria, by amendments of the Factories and Shops Act No. 4275 of 1934 and No. 4461 of 1936, it is now obligatory on all Wages Boards to adopt such provisions of Commonwealth Awards which such Boards are under the Factory and Shops Acts empowered to include in their determinations. The Secretary of Labour is also empowered under this Act to make adjustments of wages according to variations in retail price index-numbers without calling the Board together. The latest Commonwealth adult rate for Melbourne is 97s. per week (operative from 1st February, 1944), and for Hobart 94s. per week (operative from 1st February, 1944). Female rates are roughly 54 per cent. of those rates.

(iii) *Queensland.* The first formal declaration by the Industrial Arbitration Court in this State of a basic wage was gazetted on 24th February, 1921. Prior to this declaration the rate of £3 17s. per week for adult males had been generally recognized by the Court in its awards as the basic or living wage. The basic wage is nominally intended to provide for the needs of a man, his wife and three children. The variations in the adult basic wages determined by the Industrial Arbitration Court are shown below:—

#### BASIC WAGE VARIATIONS IN QUEENSLAND. (*State Jurisdiction.*)

Date of Operation.	Adult Basic Wage.			
	Male.		Female.	
	£	s. d.	£	s. d.
1st March, 1921 .. .. .	4	5 0	2	3 0
1st March, 1922 .. .. .	4	0 0	2	1 0
28th September, 1925 (a) ..	4	5 0	2	3 0
1st August, 1930 .. .. .	4	0 0	2	1 0
1st December, 1930 .. .. .	3	17 0	1	19 6
1st July, 1931 .. .. .	3	14 0	1	19 0
1st April, 1937 .. .. .	3	18 0	2	1 0
1st April, 1938 .. .. .	4	1 0	2	3 0
7th August, 1939 .. .. .	4	4 0	2	5 0
31st March, 1941 .. .. .	4	9 0	2	8 0
21st April, 1942 (b) .. .. .	4	11 0	2	9 6

(a) Fixed by Basic Wage Act. (b) Quarterly adjustments provided by judgment of 21st April, 1942—see below for latest rates.

The rates shown above are applicable throughout the South-Eastern Division of the State; allowances are added for the following divisions—Northern, 10s.; North-Western, 17s. 4d.; Mackay, 5s. 6d.; and South-Western, 7s. 4d. Half of these allowances are granted to females.

On 15th April, 1942, the Court declared the rates operative from 31st March, 1941, as adequately meeting the requirements of Section 9 of the *Industrial Conciliation and Arbitration Act* of 1932, having regard to the level of the "C" Series (All Items) retail price index for Brisbane for the December quarter, 1941. In order to ensure, however, that it would continue to do so under present exceptional conditions, the Court decided to make a quarterly declaration of the Basic Wage on the basis of the variations in the "cost of living" as disclosed by the "C" Series index for Brisbane, commencing with the figures for the March quarter, 1942. This declaration was duly made by the Court on 21st April, 1942, at the rates of £4 11s. for adult males, and £2 9s. 6d. for adult females. The latest rates (based on the index number for June quarter, 1943) are £4 17s. for adult males, and £2 14s. 6d. for adult females, operative from 2nd August, 1943.

(iv) *South Australia.* The Industrial Code 1920-1937 provides that the Board of Industry shall after public inquiry declare the living wages to be paid to adult male and female employees. Prior to the passing of this Act the living wage was declared by the Industrial Court, the first award, 7s. per day, being made by Mr. Justice Gordon in the *Brushmakers' Case* in December, 1908.

The first declaration by the Board of Industry was made on 15th July, 1921, when the living wage for adult male employees in the metropolitan area was determined at £3 19s. 6d. per week.



The family unit is not specifically defined in the Code, but the South Australian Industrial Court in 1920 decided that the average employee in respect of whom the living wage is to be declared is a man with a wife and three children.

The variations in the living wages determined by the Board of Industry are shown below :—

**BASIC WAGE VARIATIONS IN SOUTH AUSTRALIA. (State Jurisdiction.)**

Male.			Female.		
Date of Operation.	Basic Wage per Week.		Date of Operation.	Basic Wage per Week.	
	£	s. d.		£	s. d.
4th August, 1921..	3	19 6	1st September, 1921	1	15 0
27th April, 1922 ..	3	17 6	..	..	..
8th November, 1923	3	18 6	..	..	..
15th May, 1924 ..	4	2 0	13th November, 1924	1	18 0
13th August, 1925	4	5 6	3rd September, 1925	1	19 6
30th October, 1930	3	15 0	15th January, 1931	1	15 0
10th September, 1931	3	3 0	24th December, 1931	1	11 6
7th November, 1935	3	6 0	16th January, 1936	1	13 0
7th January, 1937	3	9 6	29th April, 1937	1	14 9
25th November, 1937	3	14 0	25th November, 1937	1	16 6
5th January, 1939	3	18 0	5th January, 1939	1	18 0
28th November, 1940	4	4 0	28th November, 1940	2	1 0
26th November, 1941	4	7 0	26th November, 1941	2	3 6
15th October, 1942	4	14 0	15th October, 1942	2	6 2

(v) *Western Australia.* The Industrial Arbitration Act 1912-1937 provides that the Court of Arbitration shall determine and declare a basic wage to operate from 1st July of each year and, wherever and whenever necessary, differential basic rates in special or defined areas of the State. In an amending Act of 1930 provision is made for quarterly adjustments when the Government Statistician reports a variation in the cost of living of 1s. or more per week compared with the previous quarter.

The first declaration of the basic wage by the Court of Arbitration since the authority to fix one was vested in the Court in 1925 was made on 11th June, 1926. The family unit is not specifically defined in the Act, but it has been the practice of the Court to take as a basis for its calculations a man, his wife and two dependent children. The variations in the annual declarations of the Court of Arbitration are shown in the following table :—

**BASIC WAGE VARIATIONS IN WESTERN AUSTRALIA. (State Jurisdiction.)**

Date of Operation.	Metropolitan Area.		South-West Land Division (excluding Metropolitan Area).		Other Parts of State.	
	Male.	Female.	Male.	Female.	Male.	Female.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1st July, 1926	4 5 0	2 5 11	4 5 0	2 5 11	4 5 0	2 5 11
.. .. 1929	4 7 0	2 7 0	4 7 0	2 7 0	4 7 0	2 7 0
.. .. 1930	4 6 0	2 6 5	4 5 0	2 5 11	4 5 0	2 5 11
.. .. 1931	3 18 0	2 2 2	3 17 0	2 1 8	3 17 0	2 1 8
.. .. 1932	3 12 0	1 18 11	3 13 6	1 19 8	3 18 0	2 2 2
.. .. 1933	3 8 0	1 16 9	3 9 6	1 17 6	3 17 6	2 1 10
.. .. 1934	3 9 6	1 17 6	3 10 0	1 17 10	3 19 6	2 2 11
.. .. 1935	3 10 6	1 18 1	3 11 2	1 18 5	4 4 4	2 5 6
.. .. 1936	3 10 6	1 18 1	3 11 9	1 18 9	4 6 0	2 6 5
.. .. 1937	3 13 9	1 19 10	3 14 8	2 0 4	4 7 0	2 7 0
.. .. 1938	4 0 0	2 3 2	4 1 0	2 3 9	4 13 3	2 10 4
.. .. 1939	4 2 2	2 4 4	4 3 1	2 14 10	4 16 4	2 12 0
.. .. 1940	4 2 8	2 4 8	4 3 3	2 4 11	4 16 3	2 12 0
.. .. 1941	4 8 0	2 7 6	4 9 3	2 8 2	5 3 6	2 15 11
.. .. 1942	4 10 5	2 8 10	4 10 10	2 9 1	5 5 7	2 17 0
.. .. 1943	4 19 1	2 13 6	4 18 1	2 13 0	5 5 9	2 17 1

(a) Excludes Gold-fields areas, where rates were the same as those operating from 1st July, 1926.

The latest rates payable (applicable from 1st August, 1943), in accordance with the quarterly adjustments declared by the Court are—Metropolitan area, males, 10s. 1d., females, 5s. 7d.; South-West Land Division (excluding Metropolitan area), males, 100s. 3d., females, 54s. 2d.; other parts of State, males, 107s. 10d., females, 58s. 10d.

(vi) *Current State Basic Wage Rates.* In the following table are given the current basic wage rates declared by the various State tribunals :—

### BASIC WEEKLY WAGE RATES FIXED BY STATE INDUSTRIAL TRIBUNALS.

State.	Basic Wage.		Date of Operation.	Family Unit (for Male Rate).
	Males.	Females.		
	£ s. d.	£ s. d.		
New South Wales ..	(a) 4 19 0	(a) 2 13 6	1.11.43	(b)
Victoria (c) ..	4 17 0	2 12 6	1.2.44	(c)
Queensland " ..	(d) 4 17 0	2 14 6	2.8.43	Man, wife and three children
South Australia ..	4 14 0	2 6 2	15.10.42	
Western Australia ..	(e) 5 1 1	(e) 2 4 7	1.8.43	Man, " wife and two " children
Tasmania (c) ..	4 14 0	2 11 0	1.2.44	(c)

(a) Sydney, Newcastle, Port Kembla-Wollongong; Broken Hill—males £5 1s; females £2 14s. 6d. Elsewhere, males £4 10s., females, £2 12s. (b) Commonwealth Basic Wage operative—no defined family unit. (c) None declared, but rates shown are those of Commonwealth Court which are followed to a large extent. (d) South-Eastern Division. Allowances are added for the following Divisions—Northern, 10s.; North-Western, 17s. 4d.; Mackay, 5s. 6d.; and South-Western, 7s. 4d. Half of these allowances are granted to females. (e) Metropolitan Area. Basic wage for Gold-fields areas and portions of State excluding the South-West Land Division—males, £5 7s. 10d.; females £2 8s. 3d.; South-West Land Division (excluding Metropolitan Area)—males £5 0s. 3d.; females, £2 14s. 2d.

4. *Royal Commission on the Basic Wage, 1920.*—The Commonwealth basic wage referred to in par. 2 (i) p. 469 was made operative in other parts of Australia on the basis of the relative retail price index-numbers applicable to the locality, but only one comprehensive attempt has been made by the Commonwealth authorities to ascertain specifically what the actual requirements were in the various States according to reasonable standards of comfort, including all matters comprised in the ordinary expenditure of a household in respect of a family consisting of a man, wife and three children under fourteen years of age.

The attempt referred to was made by a Royal Commission, which in its report, issued in 1920, recommended the following amounts for the various capital cities :—

	£	s.	d.
Sydney .. .. .	5	17	1
Melbourne .. .. .	5	16	6
Brisbane .. .. .	5	6	2
Adelaide .. .. .	5	16	1
Perth .. .. .	5	13	11
Hobart .. .. .	5	16	11
Six Capitals (Weighted Average) .. .. .	5	15	8

The recommendations of this Commission were not carried out owing largely to the marked advance of the amounts suggested over ruling rates\* and the grave doubts expressed as to the ability of industry to pay such rates.

\* The "Harvester" equivalent for Melbourne at the time (September quarter, 1920) was £4 13s. per week, but only £3 18s. to £4 2s. was being paid on the basis of an annual index-number.

### § 4. Child Endowment in Australia.

1. **General.**—The principle of supplementing wages by a payment in respect of dependent children under sixteen years of age has become very prominent in Australia in recent years, and has been adopted since 1941, *see* page 480. The system has been in force in various forms in England and on the Continent as far back as 1795, the first instance occurring in England in that year.

2. **New South Wales.**—The first attempt in Australia to institute the system was made in New South Wales in 1919, when a Bill was introduced into the State Parliament to provide a flat basic wage for a man and wife, and an allowance of 5s. per week for each child, the latter rate to be reduced on a sliding scale and to cease automatically when the income reached an amount of £3 per week above the basic wage. The Bill was rejected, but the subject again came up in the Session of 1926–27, when Acts,\* which have been amended during subsequent years, provided for the payment of child allowances. The original Act was assented to on 11th April, 1927, and provided for (a) the declaration of a basic wage for a man and wife,† and (b) the payment of an allowance of 5s. per week in respect of each dependent child, subject to the provision that child allowances would be paid only to the extent to which the total earnings of the worker and his family fall short of the sum represented by the *basic wage* plus child allowance at the rate of 5s. per week for each child under the age of fourteen years. Thus, a worker with three dependent children receiving £5 by way of wages would not be entitled to the allowance, but would receive it in respect of a fourth child. These payments in New South Wales operated from 23rd July, 1927. The basic wage was determined for a family unit of a man, wife and one child on 20th December, 1929, and an amending Act, assented to on 23rd December, 1929, excluded one child in each family from endowment. The fund from which child endowment payments were originally made was created by a levy on the wages bill of employers. The rate of tax from employers during the year 1930 was fixed at 1 per cent. From 1st July, 1931, the rate was fixed at 2 per cent., and from 1st January, 1932, at the rate of 5d. in the £1 on all wages above £3 per week. The levy was discontinued as from 1st January, 1934, the cost of endowment being met from the Special Income and Wages Tax, which is also used for other social services. The scheme was abolished upon the introduction of the National Scheme by the Commonwealth Government in July, 1941.

3. **Commonwealth Public Service.**—The first system of child endowment in Australia was instituted within the Commonwealth Public Service. It came into operation on 1st November, 1920, when, following on the recommendations of the Royal Commission on the Basic Wage,‡ the Commonwealth Government decided to pay a basic wage of £4 a week in certain cases and child allowances to officers at the rate of 5s. per week for each dependent child under fourteen years of age, with a limitation of salary plus allowance of £400 per annum. As the result of proceedings before the Public Service Arbitrator in 1923, these allowances were confirmed as a permanent part of the salary scheme, and the necessary fund to meet them was created by deducting the average value of the payment from the basic wage of all adult officers. In effect, therefore, the officers themselves provided the fund from which the allowance was paid. The deduction was originally £11 per annum, but later £12. The payment was subsequently limited to officers receiving up to £500 per annum including the allowance. Details regarding the introduction and method of calculating the payments under this scheme have been published in previous issues of the Official Year Book and will be found also in the *Labour Reports* issued by this Bureau. The scheme was abolished at the instance of the officers upon the introduction of the National Scheme by the Commonwealth Government in July, 1941, particulars of which appear below. The deduction of £12 per annum from salaries was consequently discontinued from 10th July, 1941.

\* Family Endowment Act 1927; Finance (Family Endowment Tax) Act 1927; Industrial Arbitration (Living Wage Declaration) Act 1927 and subsequent amendments.

† This was subsequently declared at £4 5s. per week for adult males and £2 6s. per week for adult females. A separate rate for rural employees was declared later at £4 4s. per week.

‡ The Chairman of the Commission (Mr. A. B. Piddington, K.C.), in a supplementary report, had suggested that the wage recommended (£5 16s.) be split up into a flat basic wage of £4 and a Child Endowment of 12s. per week for each dependent child, the fund for the payment of this allowance to be created by a tax on employers of 10s. qd. per employee per week.



4. **National Scheme.**—The Commonwealth Government, in June, 1927, called a conference in Melbourne of the Premiers of the several States to consider the question from a national standpoint. The Prime Minister submitted various estimates of cost of endowing dependent children under fourteen years of age in Australia at 5s. per week. After discussion, it was decided to refer the matter to a Royal Commission, to be appointed by the Commonwealth Government.

The Commission submitted its report on 15th December, 1928. It was not unanimous in its findings, and the opinions and recommendations of the members were embodied in two separate reports, which dealt exhaustively with the constitutional aspects, existing systems, industrial legislation, the basic wage, standard of living, regulation of wages, working conditions and cognate matters.

At the conference of Commonwealth and State Ministers held at Canberra in May, 1929, the Prime Minister stated that the Commonwealth Government was not prepared to adopt the scheme financed entirely from the proceeds of taxation, as had been recommended in the minority report. The Commonwealth Government agreed with the majority of the Commission that child endowment could not be separated from the control of the basic wage—a power which the Commonwealth did not possess and which the States were not prepared to relinquish. The Government, therefore, did not propose to establish any system of child endowment. It was generally agreed that any scheme which would increase the charges upon industry would be unwise at that particular time. The matter of child endowment was accordingly left to be dealt with as the State Governments should think proper.

The findings and recommendations in the *majority* and *minority* reports are given in *Labour Report*, No 19.

In 1941, the Commonwealth Government introduced a scheme of Child Endowment throughout Australia. The necessary legislation\* was introduced into Parliament on 27th March, and finally passed on 3rd April, 1941. The main features of the scheme, which came into operation on 1st July, 1941, are as follows:—

(a) Payment at the rate of 5s. per week for all children under the age of sixteen in excess of one child in each family, provided the persons claiming the endowment, and the child in respect of whom the endowment is claimed, have resided in Australia for a period of twelve months preceding the date of claim.

(b) The endowment is payable to the mother of the child, or to such persons as are prescribed.

(c) Endowment is also payable to approved institutions, not wholly or mainly dependent upon the Commonwealth or a State for their revenue, in respect of all children under 16 years of age maintained therein.

(d) The scheme will be financed partly from Consolidated Revenue; partly from the abolition of the exemptions from taxation in respect of children after the first and the major part from a tax of 2½ per cent. of all pay-rolls in excess of £20 per week.

(e) The general administration of the Act is under the control of the Director-General of Social Services, and the detailed administration is carried out by the Commissioner of Pensions and other officials appointed for the purposes of the Invalid and Old-Age Pensions Act.

The cost of the scheme during the first year of its operation, viz., from 1st July, 1941, to 30th June, 1942, was £11,302,863, particulars of which are shown in Chapter XVII. "Public Finance", together with full details of the claims in force at the end of the year, the number of endowed and unendowed children in endowed families, and other particulars.

Consequent upon the establishment of the National Scheme, appropriate steps were taken for the termination of the schemes operating in New South Wales and the Commonwealth Public Service.

\* Act No. 8, 1941 (Child Endowment Act); Act No. 2, 1941 (Pay-roll Tax Assessment Act); and Act No. 3, 1941 (Pay-roll Tax Act).

## E.—EMPLOYMENT.

## § 1. Employment.

1. **Total Occupied Persons.**—The following estimates of the total numbers of occupied males and females are based principally on data from the Census of 1933, the National Register (July, 1939), and the Civilian Register of June, 1943. These sources of information have been supplemented by Pay-roll Tax returns, which commenced in July, 1941, and by the annual censuses of Agricultural and Pastoral Statistics.

The estimates include all persons fully occupied as employers, as workers in businesses or on farms on their own account, or as wage or salary earners fully employed, or occupied as casual, part time, intermittent or seasonal workers. Wage earners unemployed in the sense that they are incapacitated or have no work to which to go are excluded. Government "relief" workers are also excluded from the figures for the depression years.

All unpaid helpers in non-rural industry have been included with wage and salary earners. Male unpaid helpers in rural industry have been included with employers and workers on own account, as it is considered that the majority of these are sons or other close relatives of farmers working in an unofficial partnership, or as learners, with the farm owner. Unpaid female helpers on farms are very numerous, but their exact number is not known. Generally, they combine part-time dairy (or other farm) work with part-time duties in the home. Like women occupied in unpaid home duties, they have been excluded from the category of occupied persons.

Members of the Defence Forces of Australia, whether permanent or enlisted for war-time service only, have not been included in the estimates which refer only to occupied civilians. Australian civilians employed by Australian or Allied Defence Forces are included in the totals, as are also all members of the Civil Construction Corps and other employees of the Allied Works Council.

**TOTAL OCCUPIED PERSONS : AUSTRALIA, 1933 TO 1943.***(Excluding Persons on Paid Strength of Defence Forces.)**(Thousands.)*

Year and Month.	Employers and Workers on Own Account.			Wage and Salary Earners.				Total Occupied Persons.
	Rural.	Non-Rural.	Total.	Rural.	Private Domestic.	Other.	Total.	

**MALES.**

1933—June ..	292.4	248.3	540.7	200.0	..	992.1	1,192.1	1,732.8
1939—July ..	300.0	299.0	599.0	202.0	..	1,293.1	1,495.1	2,094.1
1941—July ..	284.0	208.0	492.0	188.0	..	1,363.4	1,551.4	2,043.4
1942—June ..	256.0	137.8	393.8	145.5	..	1,309.5	1,455.0	1,848.8
1943—June ..	256.9	150.1	407.0	125.2	..	1,273.9	1,399.1	1,806.1

**FEMALES.**

1933—June ..	15.1	56.1	71.2	3.2	106.7	340.8	450.7	521.9
1939—July ..	16.0	62.0	78.0	4.0	124.5	437.1	565.6	643.6
1941—July ..	14.0	56.8	70.8	6.0	100.0	548.5	654.5	725.3
1942—June ..	12.0	51.9	63.9	16.0	75.0	594.8	685.8	749.7
1943—June ..	11.7	34.4	46.1	28.0	50.9	631.3	710.2	756.3

**PERSONS.**

1933—June ..	307.5	304.4	611.9	203.2	106.7	1,332.9	1,642.8	2,254.7
1939—July ..	316.0	361.0	677.0	206.0	124.5	1,730.2	2,060.7	2,737.7
1941—July ..	298.0	264.8	562.8	194.0	100.0	1,911.9	2,205.9	2,768.7
1942—June ..	268.0	189.7	457.7	161.5	75.0	1,904.3	2,140.8	2,598.5
1943—June ..	268.6	184.5	453.1	153.2	50.9	1,905.2	2,109.3	2,562.4

From June, 1933, to July, 1939, the number of occupied persons of both sexes had increased by 483,000, due partly to normal increase in the number of available

breadwinners and partly to the decrease in the number unemployed which decreased by 265,400 from 563,400 to 298,000. During the war years from July, 1939, to June, 1943, the number of males occupied as civilians decreased by 288,000, while females occupied as civilians increased by nearly 113,000, representing a net decrease of 175,000 persons. This decrease, together with decrease of unemployment (273,000), normal increase of breadwinners (106,000) and an abnormal war-time increase of 175,000 breadwinners (persons who would not otherwise have been working), balanced the net intake into the Defence Forces at June, 1943.

2. **Wage and Salary Earners in Employment.**—Estimates of wage and salary earners in employment, excluding rural employment and domestic work in private homes, based on Pay-roll Tax returns, are made monthly. Estimates for each State, and for Australia as a whole, are shown in the following table.

#### WAGE AND SALARY EARNERS IN EMPLOYMENT, 1933 TO 1943.

(*Excluding Rural Workers, Domestic Workers in Private Homes, and Persons on Paid Strength of Defence Forces.*)

(Thousands.)

Year and Month.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia. (a)
MALES.							
1933—June .. ..	380.7	288.6	139.8	80.5	70.1	29.0	992.1
1939—July .. ..	529.9	357.6	172.8	106.7	82.9	37.4	1,293.1
1941—July .. ..	546.3	403.4	166.3	118.4	82.3	38.6	1,363.4
November .. ..	555.4	405.1	167.9	121.9	83.2	39.4	1,381.3
1942—June .. ..	533.6	375.6	165.8	116.9	71.7	37.5	1,309.5
1943—June .. ..	523.8	355.3	167.5	110.6	70.4	36.9	1,273.9
December .. ..	521.8	352.9	169.0	110.0	70.7	37.9	1,272.1
FEMALES.							
1933—June .. ..	125.8	118.2	40.5	26.0	20.5	9.1	340.8
1939—July .. ..	168.0	142.8	53.2	34.0	26.2	11.6	437.1
1941—July .. ..	213.9	185.2	58.7	43.1	31.0	14.8	548.5
November .. ..	224.5	191.8	60.7	45.4	32.2	14.7	571.0
1942—June .. ..	230.3	197.5	65.5	51.1	33.1	15.8	594.8
1943—June .. ..	249.7	204.4	72.2	52.5	34.6	16.2	631.3
December .. ..	256.4	204.7	75.6	51.3	35.1	16.7	641.5
PERSONS.							
1933—June .. ..	506.5	406.8	180.3	106.5	90.6	38.1	1,332.9
1939—July .. ..	697.9	500.4	226.0	140.7	109.1	49.0	1,730.2
1941—July .. ..	760.2	588.6	225.0	161.5	113.3	53.4	1,911.9
November .. ..	779.9	596.9	228.6	167.3	115.4	54.1	1,952.3
1942—June .. ..	763.9	573.1	231.3	168.0	104.8	53.3	1,904.3
1943—June .. ..	773.5	559.7	239.7	163.1	105.0	53.1	1,905.2
December .. ..	778.2	557.6	244.6	161.3	105.8	54.6	1,913.6

(a) Includes Australian Capital Territory and Northern Territory.

Estimates for selected months are shown in the above table, but figures for Australia for the latest available month, and each of the twelve preceding months, are published regularly in the *Monthly Review of Business Statistics*.

3. **Index of Employment in Factories.**—This index is available monthly from July, 1933. "Factories" include all industrial establishments in which four or more hands are employed, or in which power other than hand is used. The index relates to employees on the pay-roll on the pay-day nearest to the 15th of the month, and includes managers, overseers, clerks and all workers except working proprietors and those engaged solely in the delivery and sale of goods.

Up to June, 1943, the index is based on the results of annual factory censuses, and actual mid-monthly factory employment of all persons is published in the *Production Bulletin* issued by this Bureau. Estimated employment in later months, subject to revision, may be obtained from the *Monthly Review of Business Statistics*.



The index shows that factory employment in Australia in 1942-43 was 71 per cent. higher than in 1928-29 and 36 per cent. higher than in the last pre-war year (1938-39).

4. **Index of Employment in Retail Stores.**—This index is published in the *Monthly Review of Business Statistics*. Until Pay-roll Tax returns commenced in July, 1941, the index was based on sample returns from a number of retail establishments. Since that date, all establishments engaged principally in retail trade and paying £20 per week or more in wages and salaries have been taken into account.

The index shows that in July, 1943, employment in retail stores was 18 per cent. lower than in July, 1941, and 14 per cent. lower than in the year 1938-39.

5. **Seasonal Employment in Australia.**—An investigation concerning the extent of seasonal employment in Australia was made during 1928 and the results were published in the Official Year Book, No. 22, and in *Labour Report*, No. 19.

## § 2. Unemployment.

1. **Total Persons Unemployed.**—The total number of persons unemployed has been recorded only at the dates of the various censuses. The Census records include all persons who state that they are unemployed, and distinguish between unemployment on account of sickness or accident, scarcity of work, industrial dispute, or any other cause. The following table sets out the number of unemployed at the Censuses, the National Register 1939, and the Civilian Register, 1943, together with the percentage which the unemployed bore to all wage and salary earners of the same sex at the time, which number is taken as the sum of those estimated to be in employment, and the unemployed. At the Census of 30th June, 1933, 1.4 per cent. of the total wage and salary earners were recorded as being out of work on account of sickness and accident, and are included in the percentages.

### UNEMPLOYMENT (ALL CAUSES) : AUSTRALIA.

Year and Month.	Wage and Salary Earners Unemployed.			Percentage of Wage and Salary Earners Unemployed.		
	Males.	Females.	Total.	Males.	Females.	Total.
	'000.	'000.	'000.	%	%	%
1911—April (Census)	48.0	8.3	56.3	4.3	2.7	4.0
1921—April     "	139.4	21.5	160.9	10.7	5.7	9.6
1933—June (a)     "	460.3	103.1	563.4	27.9	19.1	25.8
1939—July (b)     "	264.0	34.0	298.0	15.0	5.7	12.6
1943—June (b)     "	19.5	6.3	25.8	1.3	0.8	1.1

(a) The figures shown for 1933 are in excess of those actually recorded at the Census through an allowance having been made for a number of youths and girls who would normally have been wage and salary earners, but who, on account of the economic depression, having never been employed, were not classed as wage and salary earners. (b) Derived from National Register, 1939, and Civilian Register 1943, respectively.

In 1939, the National Register recorded men aged 18 to 64 years who were unemployed, but these were adjusted on account of men who failed to make National Register returns. This information, in conjunction with other data available from various sources, provided an estimate of the total number of males and females unemployed in July, 1939. At the Civilian Register of June, 1943, persons unemployed were required to indicate that fact on their cards and an estimate of unemployment has been made on this basis.

The unemployed have been estimated to be approximately 12½ per cent. in July, 1939, 4 per cent. in July, 1941, and 1 per cent. in June, 1943, calculated as a proportion of all available wage and salary earners excluding those absent in the defence forces, but including persons who have become wage and salary earners as a result of war conditions. Under conditions of intensive mobilization of man-power resources for war-time purposes, involuntary unemployment in 1943 was practically nil, and unemployment then existing was almost entirely due to sickness, accidents, etc. Owing to absence of specific definition on the civil registration card, the numbers unemployed, as recorded and stated above cannot be regarded as exact.

2. **Unemployment of Members of Trade Unions.**—(i) *General.* The particulars given in the following tables are based upon information furnished by the secretaries of trade unions. The membership of the unions regularly reporting exceeds 650,000, consisting predominantly of males and representing about 54 per cent. of the total trade union membership, and between 20 and 25 per cent. of all wage and salary earners. Unemployment returns are not collected from unions the members of which are in permanent employment, such as railway and tramway employees, and public servants, or from unions whose members are casually employed (wharf labourers, etc.). Very few of the unions pay unemployment benefit, but the majority of the larger organizations have permanent secretaries and organizers who are closely in touch with the members and with the state of trade within their particular industries. In many cases unemployment registers are kept, and provision is made in the rules for payment of reduced subscriptions by members out of work. Seasonal fluctuations in unemployment have been provided for by collecting returns quarterly since 1st January, 1913. The quarterly figures relate to persons who were out of work for three days or more during a specified week in each quarter and exclude persons out of work through strikes and lock-outs, except those outside the industry who are indirectly affected. The yearly figures quoted represent the average of the four quarters.

The value of the percentages of unemployment derived from trade union returns is in the indication they give of the trend of unemployment among trade unionists as reported by secretaries of trade unions.

(ii) *Summary for Australia, 1938 to 1942.* The following table gives a summary for Australia for the last five years and quarterly for the years 1939 to 1942. Particulars of unemployment percentages in 1943 will be found in the Appendix :—

#### UNEMPLOYMENT OF MEMBERS OF TRADE UNIONS : AUSTRALIA.

Period.	Unions.	Membership.	Unemployed.	
			Number.	Percentage.
1938 Year .. ..	390	466,325	40,138	8.7
1939 " .. ..	396	476,918	45,967	9.7
1940 " .. ..	394	491,352	39,116	8.0
1941 " .. ..	395	536,660	20,013	3.7
1942 " .. ..	393	613,534	9,754	1.6
1939 March Quarter ..	395	474,277	45,545	9.6
June " .. ..	398	477,149	45,183	9.5
September " .. ..	397	478,000	48,888	10.2
December " .. ..	392	478,245	44,253	9.3
1940 March " .. ..	394	483,806	38,307	7.9
June " .. ..	388	475,815	49,775	10.5
September " .. ..	397	496,872	36,892	7.4
December " .. ..	396	508,914	31,491	6.2
1941 March " .. ..	398	514,379	27,289	5.3
June " .. ..	395	517,696	18,595	3.6
September " .. ..	394	541,883	17,541	3.2
December " .. ..	394	572,680	16,628	2.9
1942 March " .. ..	394	588,525	10,767	1.8
June " .. ..	394	603,066	10,296	1.7
September " .. ..	394	617,076	9,603	1.6
December " .. ..	394	645,467	8,350	1.3

NOTE.—Similar figures for each of the four quarters of the years since 1912 will be found in the *Labour Reports*. The quarterly figures show the number of persons who were out of work for three days or more during a specified week in each quarter, and the annual figures, the average of the four quarters; the returns do not include persons out of work through strikes or lock-outs, except those outside the industry concerned who are indirectly affected.

The highest percentage of unemployed yet recorded (30.0) was reached in the quarter ended June, 1932.

(iii) *Australia by Industrial Groups.* The next table shows the percentages unemployed in industrial groups. Industries or occupations in which employment is stable, such as railways, and those which are subject to exceptional fluctuations, such as wharf labour, agricultural, pastoral, etc., are not included. Other occupations—domestic, hotel employees, etc.—are included in the "Other and Miscellaneous" group, as their returns are not sufficiently representative:—

**UNEMPLOYMENT OF MEMBERS OF TRADE UNIONS IN INDUSTRIAL GROUPS :  
AUSTRALIA, 1942.**

Industrial Group.	Number Reporting.		Unemployed.	
	Unions.	Members.	Number.	Percentage.
Manufacturing—				
I. Wood, Furniture, etc. ..	16	17,645	171	0.9
II. Engineering, Metal Works, etc. ..	64	172,328	1,540	0.9
III. Food, Drink, Tobacco, etc. ..	54	39,498	1,514	3.8
IV. Clothing, Hats, Boots, etc. ..	22	51,511	371	0.7
V. Books, Printing, etc. ..	12	23,335	87	0.4
VI. Other Manufacturing ..	64	76,733	1,110	1.6
VII. Building ..	46	56,184	1,564	2.8
VIII. Mining, Quarrying, etc. ..	22	28,594	1,112	3.9
X. Land Transport other than Rail- way and Tramway Services ..	14	21,900	514	2.3
IX., XI., XII., XIII., and XIV. Other and Miscellaneous ..	80	125,806	1,771	1.4
All Groups ..	394	613,534	9,754	1.6

(iv) *States, 1942.* In making interstate comparisons of unemployment percentages, allowances must be made for the circumstance that the industries included in the returns from trade unions are not quite identical in the various States, and that for some States the returns are a more representative sample than for others. The State percentages shown below, therefore, should not be read as indicating the relative degree of unemployment amongst unionists in the individual States but as an indication of the trend of unemployment as reported by the trade unions.

**UNEMPLOYMENT OF MEMBERS OF TRADE UNIONS, 1942.**

State.	Unions Reporting.		Unemployed.	
	Number.	Members.	Number.	Percentage.
New South Wales ..	114	258,692	4,742	1.8
Victoria ..	79	176,749	2,032	1.2
Queensland ..	45	76,313	1,741	2.3
South Australia ..	55	56,373	618	1.1
Western Australia ..	67	32,119	522	1.6
Tasmania ..	34	13,288	99	0.7
Australia ..	394	613,534	9,754	1.6



(v) *States, 1938 to 1942.* The following table gives the percentages in each State from 1938 to 1942 :—

UNEMPLOYMENT OF MEMBERS OF TRADE UNIONS : PERCENTAGES.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	%	%	%	%	%	%	%
1938 Year ..	9.9	8.6	6.4	8.3	5.7	7.9	8.7
1939 " ..	11.0	10.4	5.9	9.3	7.1	8.1	9.7
1940 " ..	11.0	5.8	5.5	7.0	5.6	5.2	8.0
1941 " ..	4.7	2.5	4.5	2.7	2.9	3.3	3.2
1942 " ..	1.8	1.2	2.3	1.1	1.6	6.8	1.6
1940 March Quarter	9.7	6.5	5.8	8.5	6.9	4.8	7.9
June " ..	15.9	6.6	6.8	8.3	5.6	5.0	10.5
Sept. " ..	9.8	5.9	4.9	6.6	6.0	4.6	7.4
Dec. " ..	8.5	4.3	4.3	4.7	4.0	6.5	6.2
1941 March " ..	7.0	3.2	5.9	3.9	4.3	3.6	5.3
June " ..	4.5	2.4	4.2	2.8	3.1	2.4	3.6
Sept. " ..	4.0	2.2	4.1	2.3	2.4	2.6	3.2
Dec. " ..	3.5	2.1	3.8	1.8	1.8	4.5	2.9
1942 March " ..	2.0	1.4	3.2	1.0	1.7	0.7	1.8
June " ..	1.9	1.2	2.6	1.3	1.7	0.6	1.7
Sept. " ..	1.9	1.2	1.8	1.1	1.8	0.9	1.6
Dec. " ..	1.5	0.9	1.6	0.9	1.3	0.8	1.3

3. **Special Legislation for the Relief of Unemployment.**—The position in regard to unemployment in Australia became so serious during 1930 that the usual methods of providing funds for relief works and sustenance were found to be inadequate. The cessation of loans, and the general depression in industry and business, due mainly to the decline in the prices of primary products, brought about an economic crisis in all States. The number of persons thrown out of work increased rapidly with little prospect of conditions improving during the immediate future. The Commonwealth and State Governments realized that special action was necessary to provide additional funds to relieve the distress caused by continued unemployment, as the money ordinarily available was not sufficient to meet the abnormal conditions.

Special grants to the States were made by the Commonwealth Government, while special legislation relating to the relief of unemployment was enacted in practically all the States. In New South Wales, Victoria and Queensland, the Acts provided for special taxation for the purpose of creating funds for relief works and sustenance for the unemployed. The funds necessary for the relief of unemployment in South Australia Western Australia and Tasmania were provided from Revenue.

Further references to the special legislation relating to unemployment, rates of tax and sustenance payments will be found in *Labour Reports*, Nos. 22 to 31.

### § 3. Industrial Disputes.

1. **General.**—Information with regard to the collection of particulars and the methods of tabulation of industrial disputes involving stoppage of work are given in previous issues of the Official Year Book, and is also given in the annual *Labour Reports* of this Bureau.

In annual tabulations particulars are included of all disputes which either commenced or were current during the year under review. As regards "number of disputes", "establishments involved", and "workpeople involved", therefore, duplication will take place in respect of those disputes which started in and were unsettled at the end of a preceding year; the number involved will, however, be indicated in a footnote, to permit of due allowance being made in any calculations made from the tables.

2. Industrial Disputes Involving Stoppage of Work, Classified in Industrial Groups, 1941 and 1942.—The following tables give particulars of industrial disputes which either commenced or were current during 1941 and 1942, classified according to industrial groups.

## INDUSTRIAL DISPUTES IN INDUSTRIAL GROUPS, 1941.

Class.	Industrial Group.	Number.	Establishments Involved.	Workpeople Involved.			Working Days Lost.	Estimated Loss in Wages.
				Directly.	Indirectly.	Total.		
NEW SOUTH WALES.								
II.	Engineering, metal works, etc.	76	136	50,476	1,769	52,245	195,458	204,242
III.	Food, drink, etc.	8	9	1,801	..	1,801	3,123	2,962
IV.	Clothing, textiles, etc.	1	96	17,000	200	17,200	206,400	180,000
VI.	Other manufacturing	19	67	5,352	900	6,252	95,539	96,751
VII.	Building	4	11	580	7	587	855	613
VIII.	(a) Coal-mining	392	438	135,422	3,668	139,090	261,069	307,958
	(b) Other mining, quarries, etc.	3	3	1,519	127	1,646	7,162	9,378
IX.	Railway and tramway services	3	3	239	..	239	1,079	1,046
X.	Other land transport	1	1	160	..	160	2,400	1,800
XI.	Shipping, wharf labour, etc.	3	6	766	..	766	4,871	5,007
XIV.	Miscellaneous	3	3	125	..	125	123	122
Total		513	773	213,440	6,671	220,111	778,079	809,879
VICTORIA.								
I.	Wood, furniture, etc.	1	1	25	..	25	125	120
II.	Engineering, metal works, etc.	7	8	1,434	300	1,734	7,565	7,541
IV.	Clothing, textiles, etc.	2	70	12,030	11	12,041	96,041	80,042
V.	Books, printing, etc.	1	3	506	..	506	506	734
VI.	Other manufacturing	2	18	704	..	704	2,058	2,021
VII.	Building	5	42	1,411	..	1,411	12,876	13,435
VIII.	(a) Coal-mining	2	2	2,046	..	2,046	15,546	14,000
IX.	Railway and tramway services	1	1	250	..	250	250	300
X.	Other land transport	1	450	1,400	..	1,400	4,200	3,000
Total		22	595	19,806	311	20,117	139,167	121,193
QUEENSLAND.								
II.	Engineering, metal works, etc.	4	5	139	101	240	722	602
III.	Food, drink, etc.	4	98	2,116	..	2,116	31,971	33,923
IV.	Clothing, textiles, etc.	2	2	272	21	293	293	52
VII.	Building	1	1	36	..	36	72	90
VIII.	(a) Coal-mining	1	1	93	6	99	990	1,090
IX.	Railway and tramway services	2	2	658	84	742	12,124	11,626
X.	Other land transport	1	2	17	..	17	34	34
XI.	Shipping, wharf labour, etc.	2	2	61	68	129	1,620	1,157
Total		17	113	3,392	280	3,672	47,826	48,574
SOUTH AUSTRALIA.								
II.	Engineering, metal works, etc.	4	38	1,490	..	1,490	6,887	6,530
III.	Food, drink, etc.	1	1	49	..	49	196	170
VII.	Building	2	2	260	..	260	4,320	6,100
VIII.	(b) Other mining, quarries, etc.	1	7	620	..	620	3,720	4,000
IX.	Railway and tramway services	3	3	1,285	..	1,285	2,533	1,900
Total		11	51	3,704	..	3,704	17,656	18,700
WESTERN AUSTRALIA.								
I.	Wood, furniture, etc.	2	6	63	..	63	606	631
II.	Engineering, metal works, etc.	1	1	240	..	240	240	300
Total		3	7	303	..	303	846	931
TASMANIA.								
		..	..	..	..	..	..	..

## INDUSTRIAL DISPUTES IN INDUSTRIAL GROUPS, 1941—continued.

Class.	Industrial Group.	Num-ber.	Estab-lish-ments In-volved.	Workpeople Involved.			Working Days Lost.	Esti-mated Loss in Wages.
				Directly.	In-directly.	Total.		
XI.	NORTHERN TERRITORY. Shipping, wharf labour, etc.	1	1	200	..	200	600	£ 825
	AUSTRALIA.							
I.	Wood, furniture, etc. ..	3	7	88	..	88	731	751
II.	Engineering, metal works, etc. ..	92	188	53,779	2,170	55,949	210,872	219,215
III.	Food, drink, etc. ..	13	108	3,966	..	3,966	35,290	37,055
IV.	Clothing, textiles, etc. ..	5	168	29,302	232	29,534	302,734	260,094
V.	Books, printing ..	1	3	506	..	506	506	734
VI.	Other manufacturing ..	21	85	6,056	900	6,956	97,597	98,772
VII.	Building ..	12	56	2,287	7	2,294	18,123	20,238
VIII.	(a) Coal-mining ..	395	441	137,561	3,674	141,235	275,605	320,945
	(b) Other mining, quarries, etc. ..	4	10	2,139	127	2,266	12,882	15,381
IX.	Railway and tramway services ..	9	9	2,432	84	2,516	15,986	14,872
X.	Other land transport ..	3	453	1,577	..	1,577	6,634	4,834
XI.	Shipping, wharf labour, etc. ..	6	9	1,027	68	1,095	7,091	7,089
XIV.	Miscellaneous ..	3	3	125	..	125	123	122
	Total (a) ..	567	1,540	240,845	7,262	248,107	984,174	1,000,102

(a) The following disputes commenced in and were uncompleted at the end of the year, 1940, and in respect of "Number of Disputes", and "Establishments Involved" are duplicated in the figures for 1941.

State.	Number of Disputes.	Establish-ments Involved.	Number of Workpeople Involved.		
			Directly.	Indirectly.	Total.
New South Wales .. ..	2	2	528	..	528

## INDUSTRIAL DISPUTES IN INDUSTRIAL GROUPS, 1942.

Class.	Industrial Group.	Num-ber.	Estab-lish-ments In-volved.	Workpeople Involved.			Working Days Lost.	Esti-mated Loss in Wages.
				Directly.	In-directly.	Total.		
	NEW SOUTH WALES.							£
II.	Engineering, metal works, etc. ..	64	66	21,104	314	21,418	80,861	85,194
III.	Food, drink, etc. ..	16	17	3,570	323	3,893	10,047	7,796
VI.	Other manufacturing ..	10	10	6,870	519	7,389	44,456	38,695
VII.	Building ..	5	5	587	..	587	2,890	3,436
VIII.	(a) Coal-mining ..	445	463	110,138	1,736	111,874	177,242	260,478
	(b) Other mining, quarries, etc. ..	1	1	306	..	306	1,224	1,400
IX.	Railway and training services ..	2	2	158	..	158	158	171
XI.	Shipping, wharf labour, etc. ..	3	3	4,799	..	4,799	2,549	3,674
XII.	Pastoral, agricultural, etc. ..	1	1	18	..	18	108	211
XIII.	Domestic, hotels, etc. ..	1	1	85	..	85	85	26
XIV.	Miscellaneous ..	4	4	568	..	568	515	532
	Total ..	552	573	148,203	2,892	151,095	320,135	401,613
	VICTORIA.							
I.	Wood, furniture, etc. ..	1	1	140	..	140	1,400	1,700
II.	Engineering, metal works, etc. ..	6	10	2,672	140	2,812	8,746	7,675
III.	Food, drink, etc. ..	1	1	1,455	..	1,455	13,095	8,096
VI.	Other manufacturing ..	2	2	6,271	..	6,271	8,271	9,243
VII.	Building ..	8	10	1,313	..	1,313	3,560	3,757
IX.	Railway and tramway services ..	1	1	73	..	73	146	202
XII.	Pastoral, agricultural, etc. ..	1	1	55	..	55	440	336
	Total ..	20	26	11,979	140	12,119	35,658	31,009



## INDUSTRIAL DISPUTES IN INDUSTRIAL GROUPS, 1942—continued.

Class.	Industrial Group.	Num-ber.	Estab-lish-ments In-volved.	Workpeople Involved.			Working Days Lost.	Esti-mated Loss in Wages.
				Directly.	In-directly.	Total.		
QUEENSLAND.								
II.	Engineering, metal works, etc...	1	1	44	52	96	768	£ 875
III.	Food, drink, etc. ..	2	2	139	..	139	967	708
XI.	Shipping, wharf labour, etc. ..	1	1	44	..	44	132	207
XIV.	Miscellaneous ..	2	2	143	..	143	835	355
Total .. ..		6	6	370	52	422	2,702	2,145
SOUTH AUSTRALIA.								
II.	Engineering, metal works, etc...	9	9	2,039	..	2,039	4,089	4,128
III.	Food, drink, etc. ..	2	41	781	..	781	4,057	3,952
IV.	Clothing, textiles, etc. ..	1	1	300	..	300	2,100	2,700
XI.	Shipping, wharf labour, etc. ..	1	1	497	..	497	248	276
Total .. ..		13	52	3,617	..	3,617	10,494	11,056
WESTERN AUSTRALIA.								
II.	Engineering, metal works, etc...	1	1	728	..	728	5,096	5,472
III.	Food, drink, etc. ..	3	80	211	..	211	3,079	3,630
VIII.	(a) Coal-mining ..	2	2	157	..	157	323	390
IX.	Railway and tramway services	1	1	521	..	521	261	260
XI.	Shipping, wharf labour, etc. ..	1	1	180	12	192	96	120
Total .. ..		8	85	1,797	12	1,809	8,855	9,872
TASMANIA.								
VI.	Other manufacturing ..	1	1	17	..	17	17	16
IX.	Railway and tramway services	1	1	34	..	34	34	29
Total .. ..		2	2	51	..	51	51	45
NORTHERN TERRITORY.								
XI.	Shipping, wharf labour, etc. ..	1	1	150	..	150	300	350
AUSTRALIA.								
I.	Wood, furniture, etc. ..	1	1	140	..	140	1,400	1,700
II.	Engineering, metal works, etc. ..	81	87	26,587	506	27,093	99,560	103,344
III.	Food, drink, etc. ..	24	141	6,156	323	6,479	31,245	24,182
IV.	Clothing, textiles, etc. ..	1	1	300	..	300	2,100	2,700
VI.	Other manufacturing ..	13	13	13,158	519	13,677	52,744	47,954
VII.	Building ..	13	15	1,900	..	1,900	6,450	7,193
VIII.	(a) Coal-mining ..	447	465	110,295	1,736	112,031	177,565	260,868
	(b) Other mining, quarries, etc. ..	1	1	306	..	306	1,224	1,400
IX.	Railway and tramway services	5	5	786	..	786	509	662
XI.	Shipping, wharf labour, etc. ..	7	7	5,670	12	5,682	3,325	4,627
XII.	Pastoral, agricultural, etc. ..	2	2	73	..	73	548	547
XIII.	Domestic hotels, etc. ..	1	1	85	..	85	85	26
XIV.	Miscellaneous ..	6	6	711	..	711	1,350	887
Total (a) .. ..		602	745	166,167	3,096	169,263	378,195	456,090

(a) The following disputes commenced in, and were uncompleted at the end of the year 1941, and in respect of "Number of Disputes" and "Establishments Involved" are duplicated in the figures for 1942.

State.	Number of Disputes.	Establish-ments Involved.	Number of Workpeople Involved.		
			Directly.	Indirectly.	Total.
New South Wales ..	2	2	720	..	720

3. **Industrial Disputes, Australia, 1938 to 1942.**—The following table gives particulars of the number of industrial disputes, the number of workpeople involved, and the losses in working days and wages caused by disputes which either commenced or were current during each of the years 1938 to 1942 classified according to industrial groups.

Satisfactory comparisons of the frequency of industrial disputes in classified industries can be made only after omitting those which are recorded for coal-mining (Group VIII.(a)). For 1913 the proportion of disputes in the mining industry represented practically 50 per cent. of the total number recorded. In subsequent years the proportion remained high, ranging from 45 per cent. in 1917 and 1918 to as much as 82 in 1940. For the year 1942 these disputes represented 74 per cent. of the total for that year. In the past five years working days lost through dislocations involving workpeople engaged in coal-mining amounted to 3,044,479, representing 65 per cent. of the total loss of working days during the period :—

### INDUSTRIAL DISPUTES : AUSTRALIA.

Year.	Manu- facturing. (Groups I. to VI.)	Building. (Group VII.)	Mining (Group VIII.)		Transport, Land and Sea. (Groups IX. to XI.)	Miscel- laneous. (Groups XII. to XIV.)	ALL GROUPS.
			Coal- mining.	Other Mining, etc.			

#### NUMBER.

1938	..	43	3	314	6	4	6	376
1939	..	20	3	362	4	6	21	416
1940	..	36	10	286	3	10	5	350
1941	..	135	12	395	4	18	3	567
1942	..	120	13	447	1	12	9	602
1938-42	..	354	41	1,804	18	50	44	2,311

#### WORKPEOPLE INVOLVED.

1938	..	12,822	4,270	122,379	1,820	1,870	793	143,954
1939	..	8,818	57	137,792	900	2,017	3,246	152,830
1940	..	15,086	2,447	167,840	492	3,514	2,318	192,597
1941	..	96,999	2,294	141,235	2,266	5,188	125	248,107
1942	..	47,689	1,900	112,031	306	6,468	869	169,263
1938-42	..	182,314	10,968	681,277	5,784	19,057	7,351	906,751

#### WORKING DAYS LOST.

1938	..	294,062	34,520	928,860	20,224	59,068	1,260	1,337,994
1939	..	108,709	563	291,067	3,805	35,016	19,994	459,154
1940	..	81,799	32,746	1,371,382	5,068	10,705	5,552	1,507,252
1941	..	647,730	18,123	275,605	12,882	29,711	123	984,174
1942	..	187,049	6,450	177,565	1,224	3,924	1,983	378,195
1938-42	..	1,319,349	92,402	3,044,479	43,203	138,424	28,912	4,666,769

#### ESTIMATED LOSS IN WAGES.

		£	£	£	£	£	£	£
1938	..	239,222	31,847	973,659	23,103	35,062	927	1,303,820
1939	..	83,540	424	335,033	4,728	22,114	9,877	455,716
1940	..	75,108	27,491	1,595,234	6,146	8,333	3,809	1,716,121
1941	..	616,621	20,238	320,945	15,381	26,795	122	1,000,102
1942	..	179,880	7,193	260,868	1,400	5,289	1,460	456,090
1938-42	..	1,194,371	87,193	3,485,739	50,758	97,593	16,195	4,931,849

4. Summary of Disputes (involving Stoppage of Work), 1938 to 1942.—The following table gives particulars of the number of industrial disputes in each State in the years 1938 to 1942 together with the workpeople involved, the working days lost, and the estimated loss in wages :—

## INDUSTRIAL DISPUTES : SUMMARY.

State or Territory.	Year.	Number.	Establishments Involved.	Workpeople Involved.			Working Days Lost.	Estimated Loss in Wages.
				Directly.	In-directly.	Total.		
New South Wales ..	1938	340	483	116,378	8,160	124,538	1,029,427	£ 1,012,915
	1939	386	460	139,301	9,230	148,531	410,183	479,330
	1940	313	680	161,766	12,238	174,004	1,238,161	1,430,416
	1941	513	773	213,440	6,671	220,111	778,079	809,879
	1942	552	573	148,203	2,892	151,095	320,135	401,613
Victoria ..	1938	19	38	7,678	2,612	10,290	104,336	87,595
	1939	10	10	1,989	180	2,169	27,313	19,946
	1940	19	44	8,279	385	8,664	108,035	101,326
	1941	22	595	19,806	311	20,117	139,167	121,193
	1942	20	26	11,979	140	12,119	35,658	31,009
Queensland ..	1938	5	9	2,657	..	2,657	87,539	87,379
	1939	5	6	373	2	375	1,870	1,753
	1940	4	8	3,013	14	3,027	131,628	157,673
	1941	17	113	3,392	280	3,672	47,826	48,574
	1942	6	6	370	52	422	2,702	2,145
South Australia ..	1938	2	2	73	52	125	249	223
	1939	2	2	170	5	175	1,880	1,416
	1940	5	5	2,745	21	2,766	9,506	7,632
	1941	11	51	3,704	..	3,704	17,656	18,700
	1942	13	52	3,617	..	3,617	10,494	11,056
Western Australia ..	1938	7	21	2,994	650	3,644	43,768	43,278
	1939	7	7	1,108	145	1,253	14,100	9,578
	1940	4	153	2,735	288	3,023	7,387	6,396
	1941	3	7	303	..	303	846	931
	1942	8	85	1,797	12	1,809	8,855	9,872
Tasmania ..	1938	2	4	2,200	..	2,200	72,175	72,030
	1939	4	4	53	..	53	166	93
	1940	2	5	216	12	228	10,466	10,641
	1941	..	..	..	..	..	..	..
	1942	2	2	51	..	51	51	45
Northern Territory ..	1938	1	1	500	..	500	500	400
	1939	2	16	234	40	274	3,642	3,600
	1940	3	4	185	700	885	2,069	2,037
	1941	1	1	200	..	200	600	825
	1942	1	1	150	..	150	300	350
Australia ..	1938	376	558	132,480	11,474	143,954	1,337,994	1,303,820
	1939	416	505	143,228	9,602	152,830	459,154	455,716
	1940	330	899	178,939	13,658	192,597	1,507,252	1,716,121
	1941	567	1,540	240,845	7,262	248,107	984,174	1,000,102
	1942	602	745	166,167	3,096	169,263	378,195	456,090

Detailed information in regard to the disputes during the years 1938 to 1942 and previous years is given in the *Labour Reports*, issued by this Bureau.



5. Duration of Industrial Disputes, 1942.—The following table gives particulars of industrial disputes during 1942 according to certain adopted limits of duration :—

### INDUSTRIAL DISPUTES : DURATION, AUSTRALIA, 1942.

Limits of Duration.	Num- ber.	Workpeople Involved.			Working Days Lost.	Estimated Loss in Wages.
		Directly.	Indirectly.	Total.		
						£
1 day and less .. ..	401	108,798	1,514	110,312	106,450	148,757
2 days and more than 1 day	76	24,597	38	24,635	47,633	58,025
3 " " " 2 days	29	7,885	31	7,916	23,634	28,287
Over 3 days and less than 1 week (6 days) .. ..	38	8,133	689	8,822	38,518	44,733
1 week and less than 2 weeks	39	13,837	342	14,179	113,870	116,591
2 " " " 4 weeks	17	2,450	482	2,932	36,790	44,852
4 " " " 8 weeks	2	467	..	467	11,300	14,845
8 weeks and over .. ..	..	..	..	..	..	..
Total .. ..	602	166,167	3,096	169,263	378,195	456,090

6. Causes of Industrial Disputes, 1913 to 1942.—The following table shows the principal causes of the industrial disputes which occurred in 1913 and from 1937 to 1942 :—

### INDUSTRIAL DISPUTES : CAUSES, AUSTRALIA.

Causes of Dispute.	1913.	1937.	1938.	1939.	1940.	1941.	1942.
NUMBER.							
1. Wages—							
(a) For increase .. ..	42	28	10	13	16	46	8
(b) Against decrease .. ..	4	1	2	4	1	4	2
(c) Other wage questions ..	31	77	67	58	54	102	107
2. Hours of Labour—							
(a) For reduction .. ..	3	2	2	12	..	2	1
(b) Other disputes re hours ..	7	4	1	9	20	10	8
3. Trade Unionism—							
(a) Against employment of non-unionists .. ..	8	5	5	1	2	8	9
(b) Other union questions ..	5	24	43	48	34	28	24
4. Employment of particular Classes or Persons .. ..	44	80	106	107	80	154	139
5. Working Conditions .. ..	51	72	73	90	46	81	132
6. Sympathetic .. ..	5	11	4	1	7	15	14
7. Other Causes .. ..	8	38	63	73	90	117	158
Total .. ..	208	342	376	416	350	567	602

### WORKPEOPLE INVOLVED.

1. Wages—							
(a) For increase .. ..	8,633	7,678	967	4,384	4,242	12,157	2,150
(b) Against decrease .. ..	563	15	914	279	296	848	957
(c) Other wage questions ..	7,160	21,588	21,399	17,094	17,841	32,403	32,025
2. Hours of Labour—							
(a) For reduction .. ..	460	429	4,050	4,150	..	1,432	85
(b) Other disputes re hours ..	1,819	1,474	36	3,383	7,635	3,720	1,630
3. Trade Unionism—							
(a) Against employment of non-unionists .. ..	5,370	3,542	1,659	21	254	913	1,797
(b) Other union questions ..	1,418	5,889	13,241	16,030	10,314	10,392	8,302
4. Employment of particular Classes or Persons .. ..	11,370	20,401	30,020	28,691	28,955	43,880	41,402
5. Working Conditions .. ..	10,785	17,854	40,206	28,092	14,614	30,051	29,908
6. Sympathetic .. ..	947	3,235	1,260	2,600	4,973	10,855	7,977
7. Other Causes .. ..	1,758	14,068	30,202	48,106	103,473	101,448	46,030
Total .. ..	50,283	96,173	143,954	152,830	192,597	248,107	169,263

INDUSTRIAL DISPUTES: CAUSES, AUSTRALIA—*continued.*

Causes of Dispute.	1913.	1937.	1938.	1939.	1940.	1941.	1942.
WORKING DAYS LOST.							
1. Wages—							
(a) For increase .. ..	100,069	144,372	32,390	24,115	25,590	106,518	7,403
(b) Against decrease .. ..	9,438	30	7,340	4,472	592	1,368	13,991
(c) Other wage questions ..	78,183	107,904	116,468	67,550	92,473	111,258	98,669
2. Hours of Labour—							
(a) For reduction .. ..	2,774	1,897	34,300	21,636	..	4,232	85
(b) Other disputes re hours ..	15,111	4,442	900	10,752	20,977	12,781	2,607
3. Trade Unionism—							
(a) Against employment of non-unionists .. ..	91,002	20,750	2,906	63	1,866	5,852	5,583
(b) Other union questions ..	32,388	9,569	80,280	52,086	15,553	62,870	9,179
4. Employment of particular Classes or Persons .. ..	191,723	138,428	104,454	81,101	105,166	112,360	98,658
5. Working Conditions .. ..	73,562	85,746	744,147	108,409	33,709	122,279	66,348
6. Sympathetic .. ..	24,066	11,230	4,440	2,600	16,196	18,830	12,593
7. Other Causes .. ..	5,212	32,743	210,369	86,370	1,195,130	425,826	63,079
Total .. ..	623,528	557,111	1,337,994	459,154	1,507,252	984,174	378,195

The main causes of industrial disputes are "Wage" questions, "Working Conditions," and "Employment of Particular Classes or Persons." In each of the years 1913 to 1925 with the exception of 1922, the number of dislocations concerning "Wages" exceeded those caused by any other question, and varied between a minimum proportion of 19 per cent. in 1942 and a maximum of 45 per cent. in 1916. Since 1925 the number of disputes concerning "Wages" has averaged 24 per cent. of the total number for each year. The majority of the dislocations of work classified under the heading, "Employment of Particular Classes or Persons," are stoppages for the purpose of protesting against the dismissal of certain employees, who, in the opinion of their fellow-workers, have been unfairly treated or victimized. This class of dispute occurs very frequently in the coal-mining industry, and has been the principal cause of industrial disturbance in most of the years since 1925, averaging 29 per cent. of the total number for each year during that period. The number of disputes over "Trade Union" questions has represented a fairly uniform proportion of the total number of disputes during the years under review, while stoppages of work concerning "Hours of Labour" increased during 1926 and 1927, but have been relatively unimportant during recent years.

7. Results of Industrial Disputes.—The results of industrial disputes during each of the last six years are given in the following table:—

## INDUSTRIAL DISPUTES CLASSIFIED ACCORDING TO RESULTS: AUSTRALIA.

Year.	Number.				Workpeople Involved.				Working Days Lost.			
	In Favour of Workpeople.	In Favour of Employer.	Compromise.	Indefinite.	In Favour of Workpeople.	In Favour of Employer.	Compromise.	Indefinite.	In Favour of Workpeople.	In Favour of Employer.	Compromise.	Indefinite.
1937..	86	206	7	41	23,930	58,665	713	12,273	192,181	285,755	3,744	37,395
1938..	94	229	18	34	24,953	75,100	6,037	36,201	99,375	149,959	45,205	1,022,521
1939..	75	302	19	20	22,517	117,445	6,233	6,635	104,192	256,602	43,569	54,791
1940..	90	213	12	24	36,303	128,874	1,800	25,092	162,662	443,682	6,655	885,941
1941..	225	287	24	29	74,856	146,031	11,438	15,062	271,539	522,837	93,424	94,464
1942(a)	166	393	9	28	48,848	107,656	2,517	8,913	114,540	201,381	13,041	36,973

(a) The following disputes which were incomplete at 31st December, 1942, should be added to the above figures to effect a balance with those published in the preceding tables:—New South Wales, 5 disputes; 881 workpeople; 11,364 working days lost. Victoria, 1 dispute; 448 workpeople; 896 working days lost.

8. Methods of Settlement.—The following table gives a classification of the methods of settlement according to the adopted schedule :—

### INDUSTRIAL DISPUTES : METHODS OF SETTLEMENT, AUSTRALIA.

Methods of Settlement.	1913.	1937.	1938.	1939.	1940.	1941.	1942.(a)
NUMBER.							
Negotiation—							
Direct between employers and employees or their representatives	119	265	245	277	192	245	233
By intervention or assistance of distinctive third party—not under Commonwealth or State Industrial Act .. ..	17	9	17	17	12	22	117
Under State Industrial Act—							
By intervention, assistance, or compulsory conference ..	19	6	3	5	6	9	9
By reference to Board or Court ..	22	4	9	2	7	56	16
Under Commonwealth Conciliation and Arbitration Act—							
By intervention, assistance, or compulsory conference ..	4	2	9	6	25	57	43
By filling places of workpeople on strike or locked out .. ..	13	5	..	1	..	3	..
By closing-down establishment permanently .. ..	1	1	..	2	1	..	..
By other methods .. ..	13	48	92	106	105	173	178
Total .. ..	208	340	375	416	348	565	596

### WORKPEOPLE INVOLVED.

Negotiation—							
Direct between employers and employees or their representatives	23,357	72,430	70,481	80,195	55,084	72,865	57,556
By intervention or assistance of distinctive third party—not under Commonwealth or State Industrial Act .. ..	3,172	2,764	4,845	2,489	3,520	5,757	42,072
Under State Industrial Act—							
By intervention, assistance, or compulsory conference ..	6,505	1,804	1,844	4,925	2,766	3,336	2,259
By reference to Board or Court ..	12,774	428	5,519	429	2,617	21,788	4,642
Under Commonwealth Conciliation and Arbitration Act—							
By intervention, assistance, or compulsory conference ..	659	480	21,289	3,268	35,203	55,019	14,873
By filling places of workpeople on strike or locked out .. ..	658	825	..	20	..	340	..
By closing-down establishment permanently .. ..	170	86	..	178	13	..	..
By other methods .. ..	2,988	16,773	38,313	61,326	92,866	88,282	46,532
Total .. ..	50,283	95,590	142,291	152,830	192,069	247,387	167,934

### WORKING DAYS LOST.

Negotiation—							
Direct between employers and employees or their representatives	94,400	396,410	203,175	245,709	152,848	159,347	98,650
By intervention or assistance of distinctive third party—not under Commonwealth or State Industrial Act .. ..	26,335	18,517	64,220	52,943	21,018	42,563	115,727
Under State Industrial Act—							
By intervention, assistance, or compulsory conference ..	187,871	48,769	11,796	35,647	8,665	14,259	10,112
By reference to Board or Court ..	221,769	7,354	326,881	3,366	30,420	107,051	18,761
Under Commonwealth Conciliation and Arbitration Act—							
By intervention, assistance, or compulsory conference ..	2,105	4,120	629,075	46,450	1,032,801	510,277	69,441
By filling places of workpeople on strike or locked out .. ..	14,139	12,571	..	20	..	5,248	..
By closing-down establishment permanently .. ..	20,400	172	..	3,892	377	..	..
By other methods .. ..	56,509	31,162	72,913	71,127	252,811	143,510	53,244
Total .. ..	623,528	519,075	1,308,060	459,154	1,498,940	982,261	365,935

(a) See note to previous table.



The majority of disputes are settled by direct negotiations between employers and employees, the proportion so settled since 1913 ranging between 43 per cent. in 1925 and 78 per cent. in 1937. Of the 596 disputes settled during 1942, 233 or 39 per cent. were settled by this method. The proportion of dislocations settled by compulsory conferences or the intervention and assistance of officials under State or Commonwealth Arbitration Acts has varied considerably during the period under review, ranging from 3 per cent. in 1915 to 22 per cent. in 1913. The proportion in 1942 was 11 per cent. In connexion with the comparatively large number of disputes which are classified as having been settled "By other methods," many stoppages of work occur each year, principally at collieries, but the cause of such stoppages is not officially known to the employers or their representatives. Such stoppages usually last for one day, and work is resumed without negotiations for a settlement of the trouble.

### § 4. Apprenticeship.

In Official Year Book No. 16, pp. 602-3 particulars are given of legislation relating to the question of apprenticeship. Tables are included showing the periods of apprenticeship fixed in the awards of the various industrial tribunals of the States and Commonwealth also the proportion of apprentices to journeymen and journeywomen. This information has been omitted from the present issue. Reference to legislation covering apprenticeship appears in the Appendix to Official Year Book, No. 23.

## F. ASSOCIATIONS.

### § 1. Labour Organizations.

1. *Registration.*—(i) *Under Trade Union Acts.* The benefits obtained by registering trade unions under the Trade Union Acts in force in the various States are not considered of much value, consequently the statistics of registered trade unions of employees do not accurately represent the position of unionism. Further, the returns for past years are so defective as to be practically valueless, inasmuch as no reliable indication is afforded of the numerical and financial position of the unions. Some of the registered unions fail to supply returns; this non-supply may lead to cancellation of the registration. Others have obtained the cancellation of their certificates of registration, the apparent reason being that they proposed to register under the Commonwealth Conciliation and Arbitration Act or a State Arbitration Act. In Queensland, some of the largest labour unions withdrew from registration during 1911, mainly on account of the necessity for closer restriction of their objects as set forth in their rules, consequent on legal decisions affecting trade unions. In Victoria and in South Australia very few of the existing unions are registered under the Trade Union Acts. It will be seen, therefore, that the available information under this heading is too meagre for statistical purposes.

(ii) *Under Industrial Arbitration Acts.* Information with regard to registrations of employers' associations and trade unions under the various State Industrial Arbitration Acts will be found in previous issues of the Official Year Book. The latest information available as to registrations is as follows:—New South Wales, 193 industrial unions of employers and 157 industrial unions of employees, the membership not being available in either case; Queensland, 18 industrial unions of employers with approximately 14,000 members, and 79 industrial unions of employees with approximately 204,000 members; South Australia, 33 organizations of employees with 42,000 members; Western Australia, 35 organizations of employers with 708 members, and 133 organizations of employees with 57,000 members. There is no provision in the South Australian Industrial Acts for the registration of organizations of employers, and in Victoria and Tasmania, where Wages Board systems of wage fixation are in operation, organizations of employers and employees are not required to register. Registration under Commonwealth legislation began in 1906. In that and the four years following, there was but one union of employers;

another was registered in 1911. The unions of employees registered were 20 in 1906, with 41,413 members. On 31st December, 1942, there were 40 registered organizations of employers and 153 registered organizations of employees, with a total estimated membership for the latter of approximately 1,000,000.

2. Particulars regarding Trade Unions.—(i) *Types*. The trade unions in Australia are very diverse in character, and range from the small independent association to the large interstate organization, which, in its turn, may be merely a branch of a British or International union. Broadly speaking, there are four distinct classes of labour organizations:—(i) the local independent; (ii) the State; (iii) the interstate; and (iv) the Australasian or International; but a number of variations occur from each of these classes. The leading characteristics of each of these types are briefly outlined in *Labour Report No. 2* (pp. 7-9) issued by this Bureau.

(ii) *Number and Membership*. As already stated, the figures for trade unions registered under the Acts do not represent the position of unionism in Australia. In 1912 the Labour and Industrial Branch of the Commonwealth Bureau of Census and Statistics was established and with the cordial co-operation of the officials of the labour organizations comprehensive figures relating to the development of organized labour are now available. The following table shows the position at the end of 1942:—

TRADE UNIONS : BRANCHES AND MEMBERS, 1942.

State or Territory.	Number of Separate Unions.	Number of Branches.	Number of Members.
New South Wales .. .. .	194	597	483,039
Victoria .. .. .	142	382	302,782
Queensland .. .. .	113	308	190,578
South Australia .. .. .	113	174	111,388
Western Australia .. .. .	138	208	64,535
Tasmania .. .. .	73	71	26,893
Northern Territory .. .. .	4	..	1,406
Australian Capital Territory .. .. .	15	1	1,796
Total .. .. .	792	1,741	1,182,417
Australia .. .. .	377 (a)	2,156 (b)	1,182,417

(a) Allowing for interstate duplication. The figures represent the number of distinct organizations and interstate groups of organizations in Australia—not the total number of organizations which are practically independent and self-governing.

(b) See remarks below.

In the preceding table the number of separate unions in each State refers to the number of unions which are represented in each State, excluding branches therein, and each union is counted once only. Except in the last line, the number of branches indicates the number of branches of State head offices, which may, of course, themselves be branches of an interstate or larger organization. In taking the total number of separate unions in Australia (see last line but one), it is obvious that, in the case of interstate and similar unions, there will be duplication, since each such union is counted once in each State in which it has any branches. In the figures given in the last line, allowance has been made for this duplication. State branches of interstate or federated unions, as well as sub-branches within a State, are included under the heading "Branches" in the third column—last line. The scheme of organization of these interstate or federated unions varies greatly in character, and the number of separate Commonwealth unions does not, therefore, fairly represent the number of practically independent organizations in Australia. In some of these unions the State organizations are bound together under a system of unification and centralized control while in others the State units are

practically independent and self-governing, the federal bond being loose and existing only for one or two specified purposes. There are, therefore, 377 distinct organizations and interstate groups of organizations in Australia, having 2,156 State branches and sub-branches, and a total of 1,182,417 members.

(iii) *Classification in Industrial Groups.* The following table shows the number of unions and members thereof in Australia at the end of each of the last five years. The number of unions specified refers to the number of different unions represented in each State and, while interstate or federated unions are counted once in each State in which they are represented, sub-branches within a State are not counted :—

TRADE UNIONS : INDUSTRIAL GROUPS, AUSTRALIA.

Industrial Groups.	1938.	1939.	1940.	1941.	1942.
NUMBER OF UNIONS.					
Manufacturing—	(a)	(a)	(a)	(a)	(a)
I. Wood, Furniture, etc. ..	17 (4)	17 (4)	17 (5)	17 (5)	17 (5)
II. Engineering, Metal Works, etc. ..	63 (22)	64 (22)	63 (23)	63 (22)	62 (22)
III. Food, Drink, Tobacco, etc. ..	70 (34)	72 (35)	72 (35)	73 (34)	68 (33)
IV. Clothing, Hats, Boots, etc. ..	26 (12)	26 (12)	26 (12)	25 (12)	25 (12)
V. Books, Printing, etc. ..	14 (8)	14 (8)	14 (8)	14 (8)	14 (8)
VI. Other Manufacturing ..	73 (36)	71 (37)	70 (37)	70 (35)	74 (37)
VII. Building ..	49 (28)	48 (28)	49 (28)	49 (27)	49 (28)
VIII. Mining, Quarrying, etc. ..	15 (12)	16 (13)	19 (13)	19 (13)	18 (13)
IX. Railway and Tramway Services ..	50 (27)	51 (29)	50 (29)	50 (29)	50 (29)
X. Other Land Transport ..	13 (6)	13 (6)	13 (6)	13 (6)	13 (6)
XI. Shipping, etc. ..	55 (20)	60 (21)	58 (21)	54 (19)	50 (19)
XII. Pastoral, Agricultural, etc. ..	9 (6)	9 (5)	9 (5)	8 (4)	9 (5)
XIII. Domestic, Hotels, etc. ..	20 (16)	19 (18)	18 (17)	18 (17)	18 (17)
XIV. Miscellaneous—					
(i) Banking, Insurance and Clerical ..	32 (16)	33 (20)	33 (20)	33 (20)	33 (21)
(ii) Public Service ..	148 (50)	147 (50)	142 (49)	142 (49)	142 (49)
(iii) Retail and Wholesale ..	8 (8)	15 (8)	15 (8)	15 (8)	15 (8)
(iv) Municipal, Sewerage and Labouring ..	16 (12)	20 (11)	20 (11)	20 (11)	20 (12)
(v) Other Miscellaneous ..	123 (49)	124 (53)	124 (54)	124 (55)	115 (53)
Total .. ..	801 (366)	819 (380)	812 (381)	807 (374)	792 (377)

NUMBER OF MEMBERS.

Manufacturing—					
I. Wood, Furniture, etc. ..	27,831	27,990	29,520	28,656	25,017
II. Engineering, Metal Works, etc. ..	94,228	99,731	112,230	153,911	199,698
III. Food, Drink, Tobacco, etc. ..	75,753	80,328	77,229	79,456	77,731
IV. Clothing, Hats, Boots, etc. ..	66,427	68,847	73,489	86,824	96,450
V. Books, Printing, etc. ..	21,661	22,303	22,997	24,049	23,574
VI. Other Manufacturing ..	48,410	52,074	62,185	86,143	100,069
VII. Building ..	47,953	45,651	53,998	58,812	69,843
VIII. Mining, Quarrying, etc. ..	43,429	48,812	49,921	47,048	44,462
IX. Railway and Tramway Services ..	104,523	105,938	101,940	111,922	120,672
X. Other Land Transport ..	18,969	19,488	18,315	21,290	20,403
XI. Shipping, etc. ..	28,780	28,760	29,173	29,740	32,013
XII. Pastoral, Agricultural, etc. ..	38,424	40,276	44,524	43,242	45,742
XIII. Domestic, Hotels, etc. ..	12,835	13,177	16,805	20,381	20,073
XIV. Miscellaneous—					
(i) Banking, Insurance and Clerical ..	37,639	39,013	42,439	48,451	56,176
(ii) Public Service ..	86,797	89,848	92,688	102,552	115,954
(iii) Retail and Wholesale ..	34,140	36,290	35,119	36,416	34,516
(iv) Municipal, Sewerage and Labouring ..	45,126	46,552	47,673	45,083	47,533
(v) Other Miscellaneous ..	52,233	50,392	45,617	51,404	52,491
Total .. ..	885,158	915,470	955,862	1,075,680	1,182,417

(a) Allowing for interstate duplication.



(iv) *Trade Unions : Numbers of Male and Female Members and Percentage to Total Wage and Salary Earners, Australia.* Prior to 1940, the numbers of male and female wage and salary earners (including unemployed) aged 20 years and over were estimated by increasing the numbers of such persons enumerated at the 1933 Census in ratio to the annual increases in males and females aged 20 to 64 years. Similarly, for wage and salary earners (including unemployed) under 20 years the numbers of such persons at the 1933 Census were increased in ratio to the annual increases in males and females 15 to 19 years. Further, allowance was made for (a) increase in the proportion of females who are wage and salary earners and (b) youths who were without occupation but were not recorded in the wage-earning group at the 1933 Census. For 1940 and subsequent years, the estimated numbers of wage and salary earners include (a) wage earners enlisted in the Defence Forces and (b) persons who were "not gainfully occupied" before the outbreak of war, but have since entered wage-earning employment.

The following table shows separately for males and females (a) the number of members of trade unions; (b) the estimated number of wage and salary earners of each sex 20 years of age and over in all professions, trades and occupations; and (c) the percentage of the former (a) on the latter (b) at the end of each year, 1938 to 1942. The estimated number of wage and salary earners includes all persons 20 years of age and over in receipt of wages or salary, as well as those unemployed, and therefore embraces a large number of adults who are not eligible for membership of any trade union, such as certain persons employed in professional occupations, as well as others who, while eligible for membership so far as the nature of their trade or occupation is concerned, do not reside in a locality which is covered by any union devoted to their particular trade or occupation. Moreover the age at which persons are eligible for membership varies in different unions. The census results are classified in quinquennial age groups, and age 20 years is taken as approximating to the age of admission to membership. A line has also been added showing the estimated numbers of "junior" workers under 20 years of age.

### TRADE UNIONS : NUMBER OF MALE AND FEMALE MEMBERS AND PERCENTAGE TO TOTAL WAGE AND SALARY EARNERS, AUSTRALIA.

Particulars.	1938.	1939.	1940.(a)	1941.(a)	1942.(a)
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#### MALES.

Estimated No. of Adult Wage and Salary Earners (20 years of age and over) ..	1,488,200	1,507,500	1,564,500	1,733,100	1,795,700
No. of Members of Unions ..	748,749	778,336	806,572	886,648	943,555
Percentage of Members on Estimated Number of Adult Wage and Salary Earners ..	50.3	51.6	51.6	51.2	52.5
Junior Wage and Salary Earners (under 20)	273,200	275,600	284,000	290,600	296,000

#### FEMALES.

Estimated No. of Adult Wage and Salary Earners (20 years of age and over) ..	410,900	417,600	430,200	449,200	477,800
No. of Members of Unions ..	136,409	137,134	149,290	189,032	238,862
Percentage of Members on Estimated Number of Adult Wage and Salary Earners ..	33.2	32.8	34.7	42.1	50.0
Junior Wage and Salary Earners (under 20)	183,900	187,200	209,300	230,400	258,300

(a) Includes wage earners enlisted in the defence forces.

TRADE UNIONS: NUMBER OF MALE AND FEMALE MEMBERS AND PERCENTAGE TO TOTAL WAGE AND SALARY EARNERS, AUSTRALIA—*continued.*

Particulars.	1938.	1939.	1940.(a)	1941.(a)	1942.(a)
<b>TOTAL.</b>					
Estimated No. of Adult Wage and Salary Earners (20 years of age and over) ..	1,899,100	1,925,100	1,994,700	2,182,300	2,273,500
No. of Members of Unions ..	885,158	915,470	955,862	1,075,680	1,182,417
Percentage of Members on Estimated Number of Adult Wage and Salary Earners ..	46.6	47.6	47.9	49.3	52.0
Junior Wage and Salary Earners (under 20)	457,100	462,800	493,300	521,000	551,300

(a) Includes wage earners enlisted in the defence forces.

(v) *Interstate or Federated Unions.* The following table gives particulars as to the number and membership of interstate or federated unions in 1942 :—

## INTERSTATE OR FEDERATED UNIONS: AUSTRALIA, 1942.

Particulars.	Unions Operating in—					Total.
	2 States.	3 States.	4 States.	5 States.	6 States. (a)	
Number of Unions ..	18	12	17	26	43	116
„ „ Members ..	30,871	37,944	169,561	299,388	495,147	1,032,911

(a) Certain unions in this group have, in addition to branches in each of the six States, branches in the Northern Territory and the Australian Capital Territory.

It appears, therefore, that 116 out of the 377 separate associations and groups of associations in Australia are organized on an interstate basis. The membership of these 116 unions was 1,032,911 or 87 per cent. of the membership of all unions.

3. **Central Labour Organizations.**—In each of the capital cities and in a number of industrial centres elsewhere, delegate organizations consisting of representatives from a group of trade unions have been established. Their revenue is raised by means of a per capita tax on the members of each affiliated union. In most of the towns where such central organizations exist, the majority of the local unions are affiliated with the central organization, which is usually known as the Labour or the Trades Hall Council, or the Labour Federation. In Western Australia a unified system of organization extends over the industrial centres throughout the State. In this State there is a provincial branch of the Australian Labour Party, having a central council and executive, and metropolitan and branch district councils, to which the local bodies are affiliated. The central council, on which all district councils are represented, meets periodically. In the other five States, however, the organization is not so close, and, while provision usually exists in the rules of the central council at the capital city of each State for the organization of district councils or for the representation of the central council on the local councils in the smaller industrial centres of the State, the councils in each State are, as a matter of fact, independent bodies.

A new Central Labour Organization, called the Australasian Council of Trade Unions, came into being during 1927. The Council was created to function on behalf of the Trade Unions of Australia, and was founded at an All-Australian Trade Union Congress held in Melbourne in May, 1927. The Australasian Council is based on the Metropolitan Trades and Labour Councils in each State, such bodies having the right to appoint two representatives to act on the Executive of the Council. The Metropolitan Trades and Labour Councils are the branches of the Australasian Council. In addition

to the representatives from the Metropolitan Councils, the Executive consists of four officers—the President, two Vice-Presidents, and a Secretary, who are elected by and from the All-Australian Trade Union Congress.

The objective of the Council is the socialization of industry, i.e., production and exchange. The methods to be adopted are :—(a) The closer organization of the workers by the transformation of the Australasian Trade Union Movement from the Craft to an Industrial basis by the establishment of one Union in each industry; (b) the consolidation of the Australasian Labour Movement with the object of unified control, administration and action; (c) the centralized control of industrial disputes; and (d) educational propaganda among unions. The Australasian Council of Trade Unions is the first interstate body in Australia with authority to deal with industrial matters of an interstate character affecting the Trade Union movement generally. It is also the body responsible for submitting to the Commonwealth Government the names of persons suitable for selection as the Australian workers' delegate to the Annual International Labour Conference.

The table below shows the number of metropolitan and district or local labour councils, together with the number of unions and branches of unions affiliated thereto, in each State at the end of 1942 :—

**CENTRAL LABOUR ORGANIZATIONS : NUMBER, AND UNIONS AFFILIATED, 1942.**

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
Number of Councils	3	5	6	2	8	2	1	27
Number of Unions and Branch Unions affiliated	105	177	81	50	268	57	9	687

The figures given in the preceding table concerning the number of unions do not necessarily represent separate unions, since the branches of a large union may be affiliated to the local trades councils in the several towns in which they are represented.

Between the trade union and the central organization of unions may be classed certain State or district councils organized on trade lines, and composed of delegates from separate unions the interests of the members of which are closely connected by reason of the occupation of their members. Delegate councils of bakers, bread carters and mill employees, or of unions connected directly or indirectly with the iron, steel, or brass trades, or with the building trades, may be so classed.

4. **Laws relating to Conditions of Labour.**—In Official Year Book No. 16 pp. 538 to 566, a conspectus is given of Labour Laws in force in Australia at the end of 1922, and of Acts and Regulations relating to Factories and Shops.

Information was contained in the same issue regarding employment under Mining Acts, followed by a brief reference to Employers' Liability and Workmen's Compensation Acts and miscellaneous legislation relating to conditions of labour enacted by the States. A conspectus of the Tribunals for the Regulation of Wages and Conditions of Labour is also included.

## § 2. Employers' Associations.

The year 1922 was the first for which information was collected in respect of Employers' Associations, and detailed particulars for that and subsequent years up to 1939 appear in previous issues of the Official Year Book and in the *Labour Reports*. Owing to limitations of space, however, the publication of the tabulated results has been discontinued.



## G.—COMPARATIVE INDEX-NUMBERS.

In order to show the relative movements of certain price and related data the following table of annual and quarterly index-numbers for the six capital cities combined has been compiled with a common base 1911 = 1,000.

## COMPARATIVE INDEX-NUMBERS FOR THE SIX CAPITAL CITIES COMBINED.

(Base (a) of each Section. Weighted Average of Six Capitals 1911 = 1,000.)

Period.	Retail Price Index-numbers.						Nominal Wages, Adult Males.	Real Wages. (b)	Percentage of Unemployment among Trade Unionists.
	Food and Groceries.	Housing (4 and 5 Rooms).	Food Housing (4 and 5 Rooms) "B" Series.	(Clothing.	Miscellaneous.	All Items of Household Expenditure "C" Series.			
Year—									%
1911 ..	1,000	1,000	1,000	(c) 1,000	(c) 1,000	(c) 1,000	1,000	1,000	4.7
1914 ..	1,144	1,082	1,121	1,140	1,140	1,140	1,081	948	8.3
1921 ..	1,902	1,410	1,717	1,883	1,537	1,680	1,826	1,087	11.2
1929 ..	1,866	1,754	1,824	1,505	1,533	1,713	1,972	1,151	11.1
1930 ..	1,682	1,711	1,693	1,437	1,521	1,618	1,939	1,198	19.3
1931 ..	1,477	1,473	1,475	1,289	1,481	1,448	1,752	1,210	27.4
1932 ..	1,425	1,336	1,391	1,215	1,458	1,377	1,639	1,190	29.0
1933 ..	1,342	1,314	1,332	1,190	1,446	1,335	1,584	1,187	25.1
1934 ..	1,400	1,324	1,371	1,187	1,437	1,355	1,590	1,173	20.5
1935 ..	1,442	1,372	1,416	1,184	1,440	1,380	1,612	1,169	16.5
1936 ..	1,475	1,437	1,461	1,197	1,441	1,409	1,638	1,162	12.2
1937 ..	1,521	1,488	1,510	1,226	1,461	1,448	1,707	1,178	9.3
1938 ..	1,584	1,540	1,568	1,253	1,463	1,488	1,799	1,209	8.7
1939 ..	1,657	1,577	1,626	1,271	1,465	1,526	1,846	1,211	9.7
1940 ..	1,679	1,590	1,644	1,445	1,519	1,588	1,889	1,190	8.0
1941 ..	1,693	1,595	1,654	1,690	1,613	1,673	1,997	1,194	3.7
1942 ..	1,843	1,596	1,742	1,977	1,693	1,809	2,164	1,196	1.6
Quarter—									
1936.									
March ..	1,445	1,413	1,433	1,191	1,432	1,391	1,623	1,167	13.4
June ..	1,455	1,425	1,444	1,194	1,431	1,397	1,629	1,166	12.8
September ..	1,489	1,449	1,474	1,107	1,455	1,420	1,641	1,156	12.0
December ..	1,510	1,461	1,491	1,203	1,449	1,430	1,659	1,160	10.7
1937.									
March ..	1,510	1,470	1,495	1,205	1,452	1,433	1,662	1,160	9.9
June ..	1,507	1,483	1,498	1,221	1,461	1,441	1,680	1,166	9.7
September ..	1,526	1,499	1,516	1,230	1,464	1,454	1,721	1,184	9.3
December ..	1,540	1,510	1,529	1,245	1,467	1,465	1,763	1,203	8.2
1938.									
March ..	1,540	1,521	1,534	1,247	1,466	1,467	1,778	1,212	8.0
June ..	1,572	1,534	1,558	1,255	1,461	1,482	1,787	1,206	8.6
September ..	1,616	1,547	1,589	1,256	1,463	1,500	1,806	1,204	9.2
December ..	1,608	1,559	1,589	1,256	1,463	1,501	1,823	1,215	8.9
1939.									
March ..	1,673	1,568	1,631	1,258	1,461	1,524	1,826	1,198	9.6
June ..	1,654	1,575	1,623	1,264	1,463	1,522	1,847	1,214	9.5
September ..	1,645	1,582	1,620	1,264	1,463	1,520	1,854	1,220	10.2
December ..	1,657	1,584	1,628	1,297	1,472	1,536	1,858	1,210	9.3
1940.									
March ..	1,640	1,587	1,620	1,342	1,481	1,542	1,864	1,209	7.9
June ..	1,688	1,589	1,649	1,415	1,518	1,583	1,875	1,184	10.5
September ..	1,676	1,591	1,642	1,450	1,533	1,590	1,903	1,197	7.4
December ..	1,710	1,593	1,663	1,572	1,542	1,635	1,912	1,169	6.2
1941.									
March ..	1,713	1,595	1,666	1,598	1,581	1,651	1,966	1,191	5.3
June ..	1,679	1,595	1,646	1,669	1,594	1,660	1,984	1,195	3.6
September ..	1,673	1,595	1,643	1,705	1,633	1,675	2,002	1,195	3.2
December ..	1,705	1,596	1,662	1,787	1,644	1,707	2,034	1,192	2.9
1942.									
March ..	1,771	1,597	1,701	1,838	1,667	1,746	2,091	1,198	1.8
June ..	1,832	1,596	1,736	1,942	1,673	1,793	2,127	1,186	1.7
September ..	1,887	1,595	1,768	2,028	1,689	1,835	2,182	1,189	1.6
December ..	1,880	1,595	1,764	2,098	1,741	1,860	2,257	1,213	1.3

(a) The index-numbers given in the separate columns of the table cannot be compared with each other in order to show the relative cost of housing, and food and groceries, since the cost in 1911 in each group or combination is made equal to 1,000.

(b) Index of nominal weekly wage rates divided by "C" Series index of retail prices.

(c) Taken back from true base (November, 1914) by means of the Food and Rent of All Houses ("A" Series) Index.

## CHAPTER XVI. PRIVATE FINANCE.

### A. GENERAL.

In issues of the Official Year Book prior to No. 25 information relating to Private Finance was included in the Chapter dealing with Finance generally, but commencing with that issue a separate Chapter has been devoted thereto. The Chapter is subdivided into the following sections:—

Banking, including Savings Banks; Companies; Insurance; Friendly Societies; and Probates.

### B. BANKING.

#### § 1. Cheque-Paying Banks.

1. *Banking Legislation.*—(i) *Commonwealth Legislation.* (a) *General.* Under Section 51 of the Commonwealth Constitution, the Commonwealth Parliament has power to legislate with respect to “Banking, other than State banking, also State banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money”. Similar powers regarding bills of exchange and promissory notes are also granted under this section. The principal legislation enacted comprises the following: The Commonwealth Bank Act 1911–1943 constituting the Commonwealth Bank and providing for its management and that of the note issue; the Bank Notes Tax Act 1910 designed to force private notes out of circulation; and the Bills of Exchange and Promissory Notes Act 1909–1936 regulating the issue of bills of exchange, cheques and promissory notes.

(b) *War-time Banking Control.* On 26th November, 1941, the National Security (War-time Banking Control) Regulations were brought into force. These regulations relate, in general, to persons or corporations (other than a bank of the Commonwealth or any State) engaged in the business of banking, and, in particular, to the fourteen trading banks, and provide for the holding of a licence in order to carry on business. The consequence of contravention of the regulations may be the withdrawal of a licence. Advances made by the trading banks must comply with the policy laid down by the Commonwealth Bank, and the purchase or subscription to loans or securities is only possible with its consent. The surplus investible funds of the trading banks are to be lodged with the Commonwealth Bank in a special account, from which they can be drawn only with the consent of the Commonwealth Bank. “Surplus investible funds” are defined as the amount by which the total assets in Australia at any time exceed the average of the total assets in Australia at the weekly balancing days during August, 1939. A rate of interest fixed by the Treasurer from time to time, and designed to secure that the trading profits of the trading bank shall not exceed the average of its annual trading profits for the three years ended 31st August, 1939, will be payable upon funds in this special account. The trading banks are further required to prepare and publish annual profit and loss accounts and balance sheets according to the specification of the Treasurer. In common with any other person or corporation which accepts deposits of money, they must also furnish statements in respect of business, as required by the Treasurer and the Commonwealth Bank. The Auditor-General is empowered to investigate and report periodically on the accounts, books and transactions of every trading bank.

On 14th March, 1942, by order under the National Security (Economic Organization) Regulations maximum rates of interest on fixed deposits, bank overdrafts, savings bank deposits, loans to local authorities and loans by pastoral companies, life assurance companies, building societies and co-operative societies were fixed.

(ii) *State Legislation.* The Acts under which the various banks are incorporated differ somewhat. While most of the older banks were incorporated by special Act or Charter, e.g., the Bank of New South Wales, by Act of Council 1817; the Bank of Australasia, by Royal Charter; the Bank of Adelaide, by Act of the South Australian Parliament; and the Bank of New Zealand, by Act of the General Assembly of New Zealand, the newer banks are generally registered under a “Companies Act”, or some equivalent Act. This is also the case with those banks which, after the crisis of 1893, were reconstructed. Banks transacting business in any State are obliged, under the existing State laws, to furnish a quarterly statement of their assets and liabilities, and

they have since the year 1908 furnished to the Commonwealth Statistician, under the Census and Statistics Act 1905-1938, quarterly statements which contain the average of the thirteen weekly statements prepared by each bank. These returns form the basis on which the statistics included herein have been compiled.

2. **Royal Commission on Monetary and Banking Systems.**—A Royal Commission was appointed by the Commonwealth Government in November, 1935, to inquire into the monetary and banking systems in operation in Australia and to report whether any, and if so what, alterations were desirable in the interests of the people of Australia as a whole, and the manner in which any such alterations should be effected. The Commission presented its report on 15th July, 1937, and a summary of the recommendations appears in Official Year Book No. 31, p. 1010.

3. **Presentation of Banking Statistics.**—In presenting statistical tabulations relating to average liabilities and assets, it is considered desirable to show the figures for the Commonwealth Bank separately from those of other cheque-paying banks. The aggregate business of all trading banks is, however, given in additional paragraphs. The figures quoted in all cases refer to the average liabilities and assets within the Commonwealth of Australia.

4. **Banks in Operation, Capital Resources, etc.**—(i) *Year 1941-42.* The paid-up capital of cheque-paying banks, together with their reserve funds, the dividend rate per cent., and the amount of their last dividends are shown in the following table. The information relates to the balance-sheet last preceding 30th September, 1942. It must be noted that in the case of some of the banks the reserve funds are invested in Government securities, while in other cases they are used in the ordinary business of the banks, and in a few instances they are partly invested and partly used in business:—

**CHEQUE-PAYING BANKS : CAPITAL RESOURCES, 1941-42.**

Bank.	Paid-up Capital.	Reserves.	Balance on Profit and Loss Account. (n)	Total Share-holders' Funds.	Reserve Liability of Share-holders.	Profits for year.	Dividends. (b)
	£.	£	£	£	£	£	£
<b>Australian Banks—</b>							
Bank of New South Wales .. ..	8,780,000	6,150,000	382,250	15,312,250	8,780,000	548,004	526,800
Commercial .. Banking Co. of Sydney Ltd.	4,739,013	4,300,000	296,878	9,335,891	4,739,012	352,162	355,426
National Bank of Australasia Ltd. ..	5,000,000	3,300,000	263,336	8,563,336	1,800,000	269,759	275,000
Commercial Bank of Australia Ltd. ..	4,117,350	2,250,000	223,255	6,590,605	..	216,813	218,027
Ballarat Banking Co. Ltd. .. ..	159,000	117,500	12,452	288,952	141,000	11,374	8,745
Queensland National Bank Ltd. .. ..	1,750,000	860,000	66,347	2,676,347	..	87,674	87,500
Brisbane Permanent Building and Banking Co. Ltd. .. ..	750,000	220,000	61,107	1,031,107	..	45,297	37,500
Bank of Adelaide ..	1,250,000	1,000,000	66,397	2,316,397	1,250,000	69,519	68,750
Bank of Australasia ..	4,500,000	4,500,000	363,889	9,363,889	4,500,000	237,013	263,625
Union Bank of Australia Ltd. ....	4,000,000	4,850,000	266,938	9,116,938	8,000,000	188,129	191,333
English, Scottish and Australian Bank Ltd.	3,000,000	3,340,000	425,581	6,765,581	2,000,000	188,892	139,125
<b>Total Australian Joint Stock Banks</b>	<b>38,045,363</b>	<b>30,887,500</b>	<b>2,428,130</b>	<b>71,361,293</b>	<b>31,210,012</b>	<b>2,214,636</b>	<b>2,171,831</b>
<b>Other Cheque-paying Banks—</b>							
<b>Commonwealth Bank of Australia—</b>							
General Bank .. ..	4,000,000	3,447,167	..	7,447,167	..	526,907	..
Rural Credits .. ..	2,000,000	421,174	..	2,421,174	..	47,385	..
Rural Bank of New South Wales (Rural Department only) (c) ..	13,703,255	62,488,929	..	16,192,184	..	39,227	..
State Bank of South Australia (General Department only) ..	(f) 1,536,899	..	..	1,536,899	..	—48,305	..
Bank of New Zealand ..	6,328,125	3,575,000	588,036	10,491,161	..	426,746	433,057

(a) Includes dividends declared but not paid at date of balance-sheet. (b) Dividends paid and payable out of profits earned during 1941-42. (c) See sub-par. (ii) below. (d) Total stocks and debentures issued including liability in respect of deposits taken over by the Commonwealth Bank December, 1931. (e) Includes £1,577,030 Special Reserve Account established under Section 12 (2) of Rural Bank of New South Wales Act 1932. (f) Capital advanced by Government of South Australia and Sale of Bonds. NOTE.—Minus sign( - ) indicates loss for year.



(ii) *Suspension of Payments, etc.*—Particulars of the suspension of payments by the Rural Bank Department of the Government Savings Bank of New South Wales, the amalgamation of this bank with the Commonwealth Savings Bank, the creation of the Rural Bank, and the amalgamations and absorptions of various other banks during the years 1931 to 1933 are given in previous issues of the Official Year Book.

5. **Commonwealth Bank.**—(i) *General.* A brief account of the foundation of the Commonwealth Bank is given in Nos. 6 to 10 of the Official Year Book. The Bank began operations in the Savings Bank Department in July, 1912, and general banking was commenced in January, 1913. In 1920 the note issue passed to the control of the Bank.

The scope of the Bank was considerably broadened in 1924 when the control was entrusted to a Board of Directors consisting of a Governor, the Secretary to the Treasury and six others "who are or have been actively engaged in agriculture, commerce, finance or industry". Commencing without capital the Bank had accumulated profits amounting to about £4,500,000 in 1924. Of this sum £4,000,000 was transferred to the capital fund of the Bank, and authority was given to increase the capital to £20,000,000. When it was in a position to do so the Board was to fix and publish the rates at which it would discount and rediscount bills of exchange. The trading banks were required to settle their balances by cheques drawn on the Commonwealth Bank, but there was to be no compulsion regarding the amount to be kept; subsequently the banks voluntarily opened accounts with the Commonwealth Bank. All banks were required to furnish to the Treasurer quarterly statements of their average weekly liabilities and assets on a basis similar to that used previously in furnishing statistics to State authorities. No alteration was made regarding the distribution of the profits of the Bank of which, until the establishment of the Mortgage Bank Department, one-half was paid to the Bank Reserve Fund and the other half to the National Debt Sinking Fund. This excluded the net earnings of the Note Issue Department, which were paid to the Consolidated Revenue Fund. Under the terms of the Commonwealth Bank Act, as amended in March, 1943, one-quarter of the profits of the General Bank Department will be paid to the Reserve Fund, one-quarter to the Mortgage Bank Department and one-half to the National Debt Sinking Fund. Of the net profits of the Note Issue Department, £150,000 per annum will be paid to the Mortgage Bank Department and the balance to the Consolidated Revenue Fund. The distribution of the profits of the Savings Bank are not affected by the amendment. Action has not yet been taken to increase the capital of the Bank nor has a discount rate been published.

A Rural Credits Department of the Bank was created by amending legislation in 1925 for the purpose of making short-term credit available for the orderly marketing of primary produce. Portion of the capital for the new department to the extent of £2,000,000 was provided by an annual appropriation of 25 per cent. of the net profits of the note issue. One half of the profits of the Rural Credits Department is paid to Reserve Fund and one half to the Development Fund.

The Commonwealth Bank Act 1927 provided for the separation of the Savings Bank Department from the General Bank and its establishment as a separate institution, and the transfer to the "Commonwealth Savings Bank of Australia" of all assets and liabilities of the Savings Bank Department. The date on which this amending Act became operative was fixed by proclamation as 9th June, 1928. The new institution was to be managed by a Commission consisting of three Commissioners, one of whom was to be a member of the Bank Board but, as appointments to the Commission have not yet been made, the Bank Board still controls the Savings Bank.

The operations of the Bank, which holds in addition to the Commonwealth Government's accounts, those of the States of Victoria (portion only), Queensland, South Australia, Western Australia and Tasmania, and many local governing bodies, have developed towards those of a Central Bank. Since the outbreak of the present war the

Bank has made large advances to finance wheat and other primary products and to assist the war programme of the Commonwealth Government. In addition, it is carrying out special war-time functions in connexion with Monetary and Exchange Control and the raising of War Loans. Since 1st July, 1927, the Bank has published a weekly statement of the accounts of the note issue and general banking departments of the Bank.

(ii) *Creation of Mortgage Bank.* An amending Act to the Commonwealth Bank Act 1911-1932, assented to on 20th March, 1943, established a Mortgage Bank Department of the Commonwealth Bank. The object is to make long term loans, with reasonable rates of interest and of repayment, to primary producers for uses in connexion with primary production or to discharge prior mortgages or charges. Loans will be secured by mortgages, and will have a duration of between five and forty-one years inclusive. They will not exceed 70 per cent. of the value of the estate or interest in land on which the loans are secured, or £5,000, whichever is the less. Provision is made for the repayment of interest and principal by equal half-yearly instalments of six months' interest together with an amount of not less than one-half of one per cent. of the original amount lent, the balance outstanding, if any, to be paid at the end of the period of the loan. Provision is also made for the repayment of loans before maturity. The capital of the Mortgage Bank Department is not to exceed £4,000,000 and will be derived as follows :—(a) £1,000,000 from the Note Issue Department's special reserve from the sale of gold ; (b) one-quarter of the annual net profits of the General Bank Department ; and (c) £150,000 per annum from the net profits of the Note Issue Department. Payments from the last two sources will cease when the capital has amounted to £4,000,000. In addition, provision exists for the making of advances by the Commonwealth Bank, the Commonwealth Savings Bank and the Treasurer, who may borrow money for this purpose. The net profits of the Mortgage Bank Department will be credited to a fund to be called the Mortgage Bank Department Reserve Fund.

(iii) *Aggregate Profits.* Particulars of the aggregate net profits, excluding those of the Note Issue Department, from the initiation of the Bank to the end of each of the last five financial years are as follows :—

## COMMONWEALTH BANK : AGGREGATE PROFITS.

Date.	Aggregate Net Profit to Date.			
	General Bank.	Savings Bank.	Rural Credits Department.	Total.
	£	£	£	£
30th June, 1938 ..	9,299,154	4,575,896	607,153	14,482,203
„ 1939 ..	9,655,733	4,892,178	638,733	15,186,644
„ 1940 ..	10,112,526	5,265,119	676,464	16,054,109
„ 1941 ..	10,498,206	5,652,570	724,870	16,875,646
„ 1942 ..	11,025,113	6,021,324	772,255	17,818,692

In accordance with the provisions of Sections 30 and 35v of the Bank Act and Section 9 (2) of the National Debt Sinking Fund Act, half of the net profits of the Bank have been placed to the credit of the Bank's Reserve Fund and half to the credit of the National Debt Sinking Fund. Up to 30th June, 1942, the latter fund, as shown in its Summary of Transactions, had benefited to the extent of £5,873,396.

(iv) *Liabilities in Australia.*—(a) Year 1941-42. The following table gives particulars of the average liabilities in Australia for each quarter of the year 1941-42 :—

**COMMONWEALTH BANK OF AUSTRALIA : LIABILITIES,  
QUARTERLY AVERAGES.(a)**

Quarter Ended—	Bills in Circula- tion.	Balances Due to Other Banks. (b)	Special War-time Deposits of Other Banks.	Deposits.			Total Liabilities.
				Not Bearing Interest.(c)	Bearing Interest.	Total Deposits.	
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
September, 1941 ..	481	31,821	..	23,429	50,324	73,753	106,055
December, 1941 ..	616	37,048	(d) 3,000	23,482	52,310	75,822	116,486
March, 1942 ..	887	37,862	27,988	26,678	55,212	81,890	148,627
June, 1942 ..	1,136	33,076	37,286	29,816	57,132	86,948	158,446

(a) Excludes Commonwealth Savings Bank. (b) Includes deposits of "Other Cheque-paying Banks". (c) Government "Set-off" Accounts (Interstate) deducted. (d) Approximate.

(b) *Quarters ended June, 1938 to 1942.* The average liabilities in Australia for the quarter ended June in each of the years 1938 to 1942 are given in the table below :—

**COMMONWEALTH BANK OF AUSTRALIA : AVERAGE LIABILITIES,  
QUARTERS ENDED JUNE.(a)**

Quarter Ended June—	Bills in Circula- tion.	Balances Due to Other Banks. (b)	Special War-time Deposits of Other Banks.	Deposits.			Total Liabilities.
				Not Bearing Interest.(c)	Bearing Interest.	Total Deposits.	
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1938 .. ..	315	19,404	..	18,505	45,257	63,762	83,481
1939 .. ..	351	18,746	..	18,127	43,275	61,402	80,499
1940 .. ..	597	28,968	..	30,054	50,169	80,223	109,788
1941 .. ..	545	29,079	..	28,699	55,150	83,849	113,473
1942 .. ..	1,136	33,076	37,286	29,816	57,132	86,948	158,446

(a) Excludes Commonwealth Savings Bank. (b) Includes deposits of "Other Cheque-paying Banks". (c) Government "Set-off" Accounts (Interstate) deducted.

(v) *Assets in Australia.* (a) Year 1941-42. The average assets in Australia for each quarter of the year 1941-42 were as follows :—

**COMMONWEALTH BANK OF AUSTRALIA : ASSETS, QUARTERLY AVERAGES.(a)**

Quarter Ended—	Coin.	Bullion.	Austra- lian Notes.	Govern- ment and Municipal Securities. (b)	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances, Discounts, Overdrafts, and all other Assets (not including Contingent Assets).c d	Total Assets.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
September, 1941	722	981	2,209	51,333	511	1,325	168	23,780	81,032
December, 1941	573	1,177	2,336	65,058	488	1,106	162	23,444	95,564
March, 1942	574	2,173	2,656	89,402	489	2,116	262	34,449	132,421
June, 1942	557	2,370	3,159	100,057	491	2,035	567	32,129	141,365

(a) Excludes Commonwealth Savings Bank. (b) Includes Treasury Bills. (c) Includes short-term loans in Australia other than Treasury Bills. (d) Government "Set-off" Accounts (Interstate) deducted.



(b) *Quarters ended June 1938 to 1942.* Particulars of the average assets in Australia for the quarter ended June in each of the last five years are given in the following table :—

**COMMONWEALTH BANK OF AUSTRALIA : AVERAGE ASSETS,  
QUARTERS ENDED JUNE.(a)**

Quarter Ended June—	Coin.	Bullion.	Australian Notes.	Government and Municipal Securities. (b)	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances, Discounts, Overdrafts, and all other Assets (not including Contingent Assets).(c)(d)	Total Assets.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1938 ..	864	353	4,021	41,953	719	108	28	15,160	63,206
1939 ..	1,057	340	3,936	44,935	694	122	43	18,947	70,974
1940 ..	875	824	2,569	33,086	624	1,274	160	37,412	76,824
1941 ..	847	679	2,298	37,976	523	1,472	163	24,626	68,584
1942 ..	557	2,370	3,159	100,057	491	2,035	567	32,129	141,365

(a) Excludes Commonwealth Savings Bank.  
loans in Australia other than Treasury Bills.

(b) Includes Treasury Bills.

(c) Includes short-term  
(d) Government "Set-off" Account (Interstate) deducted.

**6. Other Cheque-paying Banks.**—(i) *Liabilities in Australia.* (a) *Year 1941-42.* Particulars of the average liabilities in Australia of "other cheque-paying banks" for each quarter from September, 1941, to June, 1942, are given in the table following :—

**OTHER CHEQUE-PAYING BANKS : LIABILITIES, QUARTERLY AVERAGES.**

Quarter Ended—	Notes in Circulation not Bearing Interest.	Bills in Circulation not Bearing Interest.	Balances Due to Other Banks.	Deposits.			Total Liabilities.
				Not Bearing Interest.	Bearing Interest. (a)	Total.	
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
September, 1941	167	3,513	1,007	162,286	208,085	370,371	375,058
December, 1941	167	3,641	1,216	177,002	208,974	385,976	391,000
March, 1942 ..	167	3,850	1,257	190,837	207,391	398,228	403,502
June, 1942 ..	167	3,954	1,116	197,260	198,514	395,774	401,011

(a) Includes Inscribed Deposit Stock of the E. S. and A. and Queensland National Banks.

(b) *Quarters ended June, 1938 to 1942.* The next table shows the average liabilities in Australia of "other cheque-paying banks" for the quarter ended June from 1938 to 1942.

**OTHER CHEQUE-PAYING BANKS : AVERAGE LIABILITIES,  
QUARTERS ENDED JUNE.**

Quarter Ended June—	Notes in Circulation not Bearing Interest.	Bills in Circulation not Bearing Interest.	Balances Due to Other Banks.	Deposits.			Total Liabilities.
				Not Bearing Interest.	Bearing Interest. (a)	Total.	
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1938 ..	167	2,993	1,608	122,539	205,242	327,781	332,549
1939 ..	167	3,098	1,618	122,098	207,286	329,384	334,267
1940 ..	167	3,680	1,170	140,725	218,026	358,751	363,768
1941 ..	167	3,625	1,028	160,944	213,258	374,202	379,022
1942 ..	167	3,954	1,116	197,260	198,514	395,774	401,011

(a) Includes Inscribed Deposit Stock of the E. S. and A. and Queensland National Banks.

(ii) *Assets in Australia.* (a) Year 1941-42. The average assets in Australia of the banks are shown in the following table :—

**OTHER CHEQUE-PAYING BANKS : ASSETS, QUARTERLY AVERAGES.**

Quarter Ended—	Coin and Bullion.	Australian Notes and Cash with Commonwealth Bank.	Government and Municipal Securities. (a)	Special War-time Deposits with Commonwealth Bank.	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances, Discounts, Overdrafts, and all Other Assets. (b)	Total Assets.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
Sept., 1941 ..	2,118	38,452	98,205	..	11,281	5,031	2,216	304,577	461,970
Dec., 1941 ..	2,117	44,019	110,867	3,027	11,027	5,395	2,462	299,944	478,858
March, 1942 ..	1,905	43,653	110,309	27,947	10,957	4,564	2,563	286,748	488,826
June, 1942 ..	1,552	38,964	98,372	37,286	10,956	4,305	3,588	291,722	486,745

(a) Includes Treasury Bills.

(b) Includes short-term loans in Australia other than Treasury Bills.

(b) *Quarters ended June, 1938 to 1942.* The average assets in Australia of "other cheque-paying banks" for the quarter ended June in each of the years 1938 to 1942 are given below :—

**OTHER CHEQUE-PAYING BANKS : AVERAGE ASSETS, QUARTERS ENDED JUNE.**

Quarter Ended June—	Coin and Bullion.	Australian Notes and Cash with Commonwealth Bank.	Government and Municipal Securities. (a)	Special War-time Deposits with Commonwealth Bank.	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances, Discounts, Overdrafts, and all Other Assets. (b)	Total Assets.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1938 ..	2,596	31,544	44,888	..	10,023	2,895	2,229	308,041	402,216
1939 ..	3,020	28,110	48,886	..	10,493	2,776	2,211	313,740	409,236
1940 ..	2,206	37,556	85,647	..	10,950	3,068	2,366	300,968	451,791
1941 ..	2,155	35,384	104,952	..	11,271	4,502	2,560	305,009	466,733
1942 ..	1,552	38,964	98,372	37,286	10,956	4,305	3,588	291,722	486,745

(a) Includes Treasury Bills.

(b) Includes short-term loans in Australia other than Treasury Bills.

**7. All Cheque-paying Banks.**—(i) *General.* Particulars of the aggregate average liabilities and assets in Australia of all cheque-paying banks in Australia, including the Commonwealth Bank of Australia, are given in the following paragraphs.

(ii) *Liabilities in Australia.* (a) Year 1941-42. The average liabilities in Australia of all cheque-paying banks for each quarter of the year 1941-42 were as follows :—

**ALL CHEQUE-PAYING BANKS : LIABILITIES, QUARTERLY AVERAGES.(a)**

Quarter Ended—	Notes in Circulation.	Bills in Circulation.	Balances Due to Other Banks. (b)	Special War-time Deposits of Other Banks.	Deposits.			Total Liabilities.
					Not Bearing Interest. (c)	Bearing Interest. (d)	Total Deposits.	
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
September, 1941 ..	167	3,994	32,828	..	185,715	258,409	444,124	481,113
December, 1941 ..	167	4,257	38,264	(e) 3,000	200,484	261,314	461,798	507,486
March, 1942 ..	167	4,737	39,119	27,988	217,515	262,603	480,118	552,129
June, 1942 ..	167	5,090	34,192	37,286	227,076	255,646	482,722	559,457

(a) Excludes Commonwealth Savings Bank. (b) Includes other than special war-time deposits of other Cheque-paying Banks with Commonwealth Bank. (c) Government "Set-off" Accounts, Interstate (Commonwealth Bank) deducted. (d) Includes Inscribed Deposit Stock of the E. S. and A. and Queensland National Banks. (e) Approximate.

(b) *Quarters ended June, 1938 to 1942.* The next table shows the average liabilities in Australia for the quarter ended June from 1938 to 1942.

**ALL CHEQUE-PAYING BANKS : AVERAGE LIABILITIES,  
QUARTERS ENDED JUNE.(a)**

Quarter Ended June—	Notes in Circulation.	Bills in Circulation.	Balances due to Other Banks. (b)	Special War-time Deposits of Other Banks.	Deposits.			Total Liabilities.
					Not Bearing Interest.(c)	Bearing Interest.(d)	Total.	
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1938 ..	167	3,308	21,012	..	141,044	250,499	391,543	416,030
1939 ..	167	3,449	20,363	..	140,226	250,561	390,787	414,766
1940 ..	167	4,277	30,138	..	170,778	268,196	438,974	473,556
1941 ..	167	4,170	30,107	..	189,643	268,408	458,051	492,495
1942 ..	167	5,090	34,192	37,286	227,076	255,046	482,722	559,457

(a) Excludes Commonwealth Savings Bank. (b) Includes other than special war-time deposits of other Cheque-paying Banks with Commonwealth Bank. (c) Government "Set-off" Accounts, Interstate (Commonwealth Bank) deducted. (d) Includes Inscribed Deposit Stock of the E. S. and A. and Queensland National Banks.

(iii) *Assets in Australia.* (a) Year 1941-42. Particulars of the average assets in Australia for each quarter of the year 1941-42, are given in the following table:—

**ALL CHEQUE-PAYING BANKS : ASSETS, QUARTERLY AVERAGES.(a)**

Quarter Ended—	Coin and Bullion.	Australian Notes and Cash with Commonwealth Bank.	Government and Municipal Securities. (b)	Special War-time Deposits with Commonwealth Bank.	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances, Discounts, Over-drafts, and all other Assets (not including Contingent Assets). (c) (d)	Total Assets.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
Sept., 1941 ..	3,824	40,661	149,598	..	11,792	6,356	2,414	328,357	543,002
Dec., 1941 ..	3,797	46,355	176,825	3,027	11,515	6,891	2,624	323,388	574,422
March, 1942 ..	4,742	46,309	190,771	27,947	11,476	6,980	2,825	321,197	621,247
June, 1942 ..	4,479	42,123	198,429	37,286	11,447	6,340	4,155	323,851	628,110

(a) Excludes Commonwealth Savings Bank. (b) Includes Treasury Bills. (c) Includes short-term loans in Australia other than Treasury Bills. (d) Government "Set-off" Accounts, Interstate (Commonwealth Bank) deducted.

(b) *Quarters ended June, 1938 to 1942.* The average assets in Australia for the quarter ended June in each of the years 1938 to 1942 were as follows:—

**ALL CHEQUE-PAYING BANKS : AVERAGE ASSETS, QUARTERS ENDED JUNE.(a)**

Quarter ended June—	Coin and Bullion.	Australian Notes and Cash with Commonwealth Bank.	Government and Municipal Securities. (b)	Special War-time Deposits with Commonwealth Bank.	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances and all Other Assets. (c) (d)	Total Assets.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1938..	3,814	35,564	86,840	..	10,743	3,003	2,257	323,201	465,422
1939..	4,417	32,046	93,822	..	11,187	2,898	2,254	332,688	479,311
1940..	3,906	40,125	118,733	..	11,574	4,371	2,526	347,380	528,615
1941..	3,681	37,682	142,928	..	11,794	5,974	2,723	330,535	535,317
1942..	4,479	42,123	198,429	37,286	11,447	6,340	4,155	323,851	628,110

(a) Excludes Commonwealth Savings Bank. (b) Includes Treasury Bills. (c) Short-term loans in Australia other than Treasury Bills included. (d) Government "Set-off" Accounts, Interstate (Commonwealth Bank) deducted.



(iv) *Cash Reserve Ratios.* The following table shows for the quarter ended June of each of the years 1933 to 1942 the percentages of cash on liabilities "at call" and "total liabilities" respectively for the Commonwealth Bank and the other cheque-paying banks. These percentages relate throughout to business within Australia.

(a) *Commonwealth Bank.* Cash reserves comprise coin, bullion and Australian notes. "Call" liabilities comprise deposits not bearing interest and balances due to other banks. For the quarter ended June, 1942, percentages have been calculated by using (i) a "call" figure which includes special war-time deposits; and (ii) a "call" figure which excludes them.

(b) *Other Cheque-paying Banks.* Cash reserves comprise coin, bullion, Australian notes and cash with the Commonwealth Bank, while "call" liabilities include deposits not bearing interest and notes in circulation. For the quarter ended June, 1942, percentages have been calculated by using (i) a "cash" figure, which includes special war-time deposits with the Commonwealth Bank; and (ii) a "cash" figure, which excludes this item. Particulars relating to the Rural Bank of New South Wales have been excluded in all cases.

It is not strictly correct to assume that a division of deposits with cheque-paying banks into those bearing interest and not bearing interest would in all cases coincide with a definite division into fixed deposits and current accounts respectively, but in the absence of the data required to permit of an accurate apportionment, such a division has been adopted for the purposes of this analysis.

#### CHEQUE-PAYING BANKS : CASH RESERVE RATIOS.

Quarter Ended June—				On Liabilities "At Call".		On Total Liabilities.	
				Commonwealth Bank.	Other Cheque-paying Banks. (a)	Commonwealth Bank.	Other Cheque-paying Banks. (a)
				%	%	%	%
1933	..	..	..	21.9	46.2	10.1	14.6
1934	..	..	..	14.2	52.5	9.1	17.4
1935	..	..	..	16.4	36.1	8.4	12.9
1936	..	..	..	21.7	28.1	10.0	10.3
1937	..	..	..	12.8	32.1	6.6	12.0
1938	..	..	..	13.8	27.7	6.3	10.2
1939	..	..	..	14.5	25.4	6.6	9.3
1940	..	..	..	7.2	28.1	3.9	10.9
1941	..	..	..	6.6	23.0	3.4	9.7
1942	..	..	..	{ 6.1b 9.7c }	{ 39.3b 20.3c }	3.8	{ 19.3b 10.0c }

(a) Excludes Rural Bank of New South Wales. (b) Includes particulars of special war-time deposits. See (iv) (a) and (b) above. (c) Excludes particulars of special war-time deposits. See (iv) (a) and (b) above.

(v) *Advances, and Advances and Securities.* Percentage on Total Deposits. The percentages of advances, and of advances and securities on total deposits, respectively for the Commonwealth Bank, the other cheque-paying banks, and for all cheque-paying banks, are shown in the following table. The data on which the percentages are based relate only to business within Australia.

For the Commonwealth Bank and other cheque-paying banks, "Advances" are represented by the item "Advances, discounts, overdrafts, and all other assets (not including contingent assets)", which are combined with "Government and Municipal

Securities" (including Treasury Bills) under the heading "Advances and Securities". "Deposits" include deposits of all kinds except those of other cheque-paying banks with the Commonwealth Bank, i.e., "Cash with Commonwealth Bank" and "Special War-time Deposits".

In computing the percentages in this table, particulars relating to the Rural Bank of New South Wales have been excluded.

**CHEQUE-PAYING BANKS : PERCENTAGE OF ADVANCES, AND ADVANCES AND SECURITIES ON TOTAL DEPOSITS.**

Quarter Ended June—	Advances on Total Deposits.			Advances and Securities on Total Deposits.		
	Commonwealth Bank.	Other Cheque-paying Banks.(a)	Total.(a)	Commonwealth Bank.	Other Cheque-paying Banks.(a)	Total.(a)
	%	%	%	%	%	%
1933.. ..	18.0	85.3	77.0	137.2	104.1	108.2
1934.. ..	16.9	79.9	72.4	128.2	97.2	100.9
1935.. ..	16.4	87.1	77.8	113.2	104.7	105.8
1936.. ..	20.6	90.2	80.9	108.3	105.2	105.6
1937.. ..	20.9	83.8	74.6	101.4	97.8	98.3
1938.. ..	27.1	89.4	78.8	90.0	102.8	100.7
1939.. ..	30.9	90.9	81.4	104.0	105.5	105.2
1940.. ..	46.6	82.2	75.7	87.9	105.9	102.6
1941.. ..	29.4	77.8	68.9	74.7	105.7	100.0
1942.. ..	37.0	70.0	64.0	152.0	94.7	105.1

(a) Excludes Rural Bank of New South Wales.

(vi) *Deposits per head of Population.* Particulars of the average deposits per head of population are given for the quarter ended June of each of the last five years in the following table. The figures given, which are based on the aggregate for all cheque-paying banks in each State, are not adjusted on account of the Government "set-off" accounts of the Commonwealth Bank.

**ALL CHEQUE-PAYING BANKS : DEPOSITS(a) PER HEAD OF POPULATION.**

Quarter Ended June—	N.S.W.(b)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Terr.	Total.
	£	£	£	£	£	£	£	£
1938 ..	54.3	72.1	51.1	49.6	46.4	39.9	41.5	57.2
1939 ..	54.9	70.3	49.8	49.2	43.5	42.5	40.5	56.6
1940 ..	62.0	79.3	50.9	51.6	47.4	42.1	54.1	62.4
1941 ..	63.5	82.8	53.1	53.5	52.6	43.1	53.4	65.0
1942 ..	63.2	88.2	57.6	60.9	57.7	46.7	84.6	68.2

(a) Excludes deposits with Commonwealth Savings Bank.

(b) Includes Australian Capital Territory.

(vii) *Proportion of Non-Interest Bearing Deposits to Total Deposits.* The following table shows for each State the proportion of non-interest bearing deposits to the total deposits with all cheque-paying banks during the quarter ended June of each of the years 1938 to 1942. Government "set-off" accounts of the Commonwealth Bank have been deducted in arriving at the percentage for all States combined.

### ALL CHEQUE-PAYING BANKS: PROPORTION OF NON-INTEREST BEARING DEPOSITS<sup>(a)</sup> TO TOTAL DEPOSITS.

Quarter ended June—	N.S.W.(b)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Terr.	Total.
	%	%	%	%	%	%	%	%
1938 ..	40.5	31.7	40.4	27.8	40.3	37.4	65.1	36.0
1939 ..	39.3	30.7	41.0	28.7	41.7	43.3	65.6	35.9
1940 ..	42.8	35.8	40.5	28.9	39.3	41.8	72.3	38.9
1941 ..	47.0	38.1	43.1	30.8	39.6	44.1	71.0	41.4
1942 ..	53.6	43.6	47.6	38.2	47.6	48.2	69.7	47.0

(a) Excludes deposits with Commonwealth Savings Bank.

(b) Includes Australian Capital Territory.

8. Deposit Rates.—Particulars of interest rates for deposits since 1932 are given hereunder. It should be mentioned that the rates allowed by the Commonwealth Bank have not always been the same as those given by the other trading banks.

#### BANK DEPOSIT RATES.

Dates from which rates operated.				Deposits for—			
				Three Months.	Six Months.	Twelve Months.	Two Years.
				Per cent. per annum.	Per cent. per annum.	Per cent. per annum.	Per cent. per annum.
8th March, 1932 ..	..	..	..	2½	3	3½	4
May–June, 1932 (a)	..	..	..	2½	3	3½	3½
1st November, 1932 (b)	..	..	..	2½	2¾	3	3½
7th February, 1933	..	..	..	2	2½	2¾	3
12th April, 1934 ..	..	..	..	2	2½	2½	2¾
9th August, 1934 ..	..	..	..	1½	2½	2½	2¾
11th October, 1934	..	..	..	1½	2	2½	2½
17th December, 1934	..	..	..	1	1½	2½	2½
24th March, 1936 (c)	..	..	..	2	2½	2½	3
24th January, 1940..	..	..	..	1¾	2½	2½	2¾
28th May, 1940 ..	..	..	..	1½	2	2½	2½
22nd September, 1941	..	..	..	1½	1¾	2	2½
14th March, 1942 (d)	..	..	..	1½	1½	1¾	2

(a) All Banks did not take simultaneous action. (b) Bank of New South Wales reduced the rates for 6, 12 and 24 months terms by one-quarter of 1 per cent. from 23rd August, 1932. (c) Commonwealth Bank only. Bank of New South Wales from 2nd March and Bank of Adelaide from 3rd March, 1936. (d) Rates operating from 11th August, 1944, were ½, ¾, 1¼ and 1½ per cent respectively.

The “Premiers’ Plan” included, *inter alia*, provisions for the reduction of bank rates of interest on both deposits and advances.

9. Clearing House Returns.—(i) *Annual Clearings*. Particulars of the aggregate bank clearings for each capital city compiled from information supplied by the Commonwealth Bank, Sydney, are given in the following table. Since October, 1929, transactions connected with the issue and redemption of Treasury Bills have resulted in largely inflated clearings. These transactions are of an abnormal character, and for the years 1938 to 1942 are shown separately. A weekly average of bank clearings is published in the *Monthly Review of Business Statistics* and the *Quarterly Summary of Australian Statistics*.



CLEARING HOUSE RETURNS : VALUE OF BILLS, CHEQUES, ETC., 1870 TO 1942.

Year.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1870 (a) ..	..	64,532	..	..	..	..	64,532
1880 (a) ..	..	85,877	..	..	..	..	85,877
1890 ..	..	315,190	..	..	..	..	315,190
1895 ..	108,509	130,787	..	..	..	..	239,296
1900 ..	144,080	159,949	..	..	..	..	304,029
1905 ..	189,826	187,632	32,255	..	..	..	409,713
1910 ..	274,344	261,383	61,060	..	..	..	596,787
1915 ..	357,803	299,295	96,291	60,950	..	..	814,339
1920 ..	764,546	725,006	160,539	166,011	80,758	..	1,896,860
1925 ..	909,114	803,083	192,968	171,092	101,085	25,557	2,202,899
1930 (b) ..	872,390	697,641	167,999	125,684	89,034	23,092	1,975,840
1934 (b) ..	716,084	676,407	165,555	118,656	84,628	22,463	1,783,793
1935 (b) ..	775,986	724,327	181,889	132,689	94,705	24,713	1,934,309
1936 (b) ..	842,610	755,196	188,906	139,959	101,880	27,665	2,056,216
1937 (b) ..	937,334	844,488	204,493	157,596	104,891	29,874	2,278,676
1938—							
Ordinary Trans-							
actions ..	942,423	838,609	217,217	159,015	109,102	30,786	2,297,152
Treasury Bill							
Transactions..	269,264	40,655	..	..	..	..	309,919
Total ..	1,211,687	879,264	217,217	159,015	109,102	30,786	2,607,071
1939—							
Ordinary Trans-							
actions ..	932,367	812,563	222,988	152,334	107,089	33,898	2,261,239
Treasury Bill							
Transactions..	285,884	52,068	..	..	..	..	337,952
Total ..	1,218,251	864,631	222,988	152,334	107,089	33,898	2,599,191
1940—							
Ordinary Trans-							
actions ..	1,074,825	985,407	251,326	179,314	119,989	36,662	2,647,523
Treasury Bill							
Transactions..	289,677	28,830	..	..	..	..	318,507
Total ..	1,364,502	1,014,237	251,326	179,314	119,989	36,662	2,966,030
1941—							
Ordinary Trans-							
actions ..	1,139,353	1,096,037	243,937	195,757	116,565	36,469	2,828,118
Treasury Bill							
Transactions..	268,003	31,870	..	..	..	..	299,873
Total ..	1,407,356	1,127,907	243,937	195,757	116,565	36,469	3,127,991
1942—							
Ordinary Trans-							
actions ..	1,248,500	1,263,869	275,639	220,475	125,116	40,385	3,173,984
Treasury Bill							
Transactions..	272,495	17,685	..	..	..	..	289,580
Total ..	1,520,995	1,280,954	275,639	220,475	125,116	40,385	3,463,564

(a) Figures now published for these years exclude payments in coin.  
Bill transactions since their introduction in 1929.

(b) Excludes Treasury

(ii) *Index of Annual Clearings.* The following index of bank clearings in each capital city for the years 1930 and 1934 to 1942 has been computed from the figures in the previous paragraph. The base used is the average of the years 1927 to 1929. Clearings connected with the issue and redemption of Treasury Bills have been disregarded and no adjustment has been made on account of amalgamations of banking interests.

### INDEX OF BANK CLEARINGS, 1930 TO 1942.

(Base : Average of Years 1927 to 1929 = 1,000.)

Year.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Total.
1927-29 ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1930 .. ..	841	872	861	743	789	841	844
1934 .. ..	690	845	849	701	750	818	762
1935 .. ..	748	905	933	784	839	900	826
1936 .. ..	812	944	969	827	903	1,007	878
1937 .. ..	904	1,055	1,049	931	929	1,088	973
1938 .. ..	909	1,048	1,114	940	967	1,121	981
1939 .. ..	899	1,015	1,143	900	949	1,234	966
1940 .. ..	1,036	1,231	1,289	1,060	1,063	1,335	1,130
1941 .. ..	1,098	1,370	1,251	1,157	1,033	1,328	1,208
1942 .. ..	1,204	1,580	1,413	1,303	1,109	1,470	1,355

10. *Rates of Exchange.*—(i) *Australia on London.* The following statement gives particulars of the various rates of exchange, Australia on London, in operation since 10th March, 1930. In earlier issues particulars were given of the rates in operation since 16th October, 1913. The details given show the value in Australia of £100 in London according to the rates quoted by the Associated Banks for buying and selling £100 in London on telegraphic transfer. In December, 1931, the Commonwealth Bank Board undertook the responsibility of regulating sterling exchange and announcing rates each week.

### RATES OF EXCHANGE : AUSTRALIA ON LONDON, TELEGRAPHIC TRANSFER, FROM 10th MARCH, 1930.

Date on which Rate began to operate.	Exchange.		Commission for £100 (Sterling).
	London.	Australia (Mean of Buying and Selling Rates).	
	£ sterling	£      s.      d.	s.      d.
10th March, 1930 .. ..	100	100 plus 3 16 3	6 3
24th March, 1930 .. ..	..	.. .. 6 6 3	3 9
9th October, 1930 .. ..	..	.. .. 8 15 0	5 0
6th January, 1931 .. ..	..	.. .. 15 6 3	3 9
13th January, 1931 .. ..	..	.. .. 18 3 9	3 9
17th January, 1931 .. ..	..	.. .. 25 5 0	5 0
29th January, 1931 .. ..	..	.. .. 30 5 0	5 0
3rd December, 1931 .. ..	..	.. .. 25 5 0	5 0

The "Commission" which represents the banks' "turn" on each £100 sterling exchanged has been computed by taking half the difference between the buying and selling rates.

(ii) *Sterling-Dollar Rates.* The average of the daily quotations of the London-New York exchange rates are given for each month from January, 1937, to December, 1942, in the following table :—

**STERLING-DOLLAR RATES: AVERAGE RATE FOR EACH MONTH.**

Month.	1937.	1938.	1939.	1940.	1941.	1942.
	\$ to £ Stg.	\$ to £ Stg.	\$ to £ Stg.	\$ to £ Stg.	\$ to £ Stg.	\$ to £ Stg.
January ..	4.908	5.000	4.669	4.030	4.030	4.030
February ..	4.894	5.018	4.686	4.030	4.030	4.030
March ..	4.885	4.985	4.686	4.030	4.030	4.030
April ..	4.916	4.979	4.681	4.030	4.030	4.030
May ..	4.939	4.965	4.682	4.030	4.030	4.030
June ..	4.935	4.960	4.683	4.030	4.030	4.030
July ..	4.967	4.931	4.682	4.030	4.030	4.030
August ..	4.983	4.881	4.610	4.030	4.030	4.030
September ..	4.954	4.805	4.046	4.030	4.030	4.030
October ..	4.956	4.768	4.030	4.030	4.030	4.030
November ..	4.994	4.710	4.030	4.030	4.030	4.030
December ..	4.997	4.671	4.030	4.030	4.030	4.030

(iii) *Interstate.* Exchange rates between the several capital cities of the States at 30th June, 1942, were as follows :—

**INTERSTATE EXCHANGE RATES, 30th JUNE, 1942.**

Between—	And—					
	New South Wales.	Victoria.	Brisbane and adjacent towns	South Australia.	Perth and all but distant towns.	Tasmania.
	Rate per cent. s. d.	Rate per cent. s. d.	Rate per cent. s. d.	Rate per cent. s. d.	Rate per cent. s. d.	Rate per cent. s. d.
Sydney and New South Wales towns ..	..	2 6	2 6	5 0	7 6	5 0
Melbourne and Victorian towns ..	2 6	..	5 0	2 6	5 0	2 6
Brisbane and adjacent towns ..	2 6	5 0	..	7 6	10 0	7 6
Adelaide and South Australian towns ..	5 0	2 6	7 6	..	2 6	5 0
Perth and all but distant towns ..	7 6	5 0	10 0	2 6	..	7 6
Hobart and Tasmanian towns ..	5 0	2 6	7 6	5 0	7 6	..

## § 2. Savings Banks.

1. **General.**—The inauguration of Savings Banks in Australia dates from 1819, when a private Savings Bank was opened in Sydney. In 1832 the legislature created "the Savings Bank of New South Wales" under the control of trustees, and shortly after its establishment the funds of the private Savings Bank were transferred to the new institution. In the other States provision for placing deposits with Savings Banks dates from 1841 in Victoria; 1854 in Queensland; 1840 in South Australia; 1863 in Western Australia (a Savings Bank was opened in 1856 but was closed a year later); 1835 in Launceston; and 1845 in Hobart. These early banks functioned as trustee Savings Banks, but, with the exception of the Hobart and Launceston institutions, were later absorbed by or amalgamated with Government Savings Banks.



Post Office Savings Banks were established in all States except South Australia dating from 1863 onwards. Since the Federation of the Australian States in 1900 Post Offices were controlled by the Commonwealth Government, but they continued to act as Savings Bank agencies for State institutions until the establishment of the Commonwealth Bank in 1912, and now act as agents for that institution.

Savings Banks at present operating are the Commonwealth Savings Bank (all States); State Savings Bank of Victoria; State Savings Bank of South Australia; and the two Trustee Banks—Hobart and Launceston.

2. **The Commonwealth Savings Bank.**—The Commonwealth Savings Bank opened for business in Victoria on 15th July, 1912; in Queensland on 16th September, 1912; in the Northern Territory on 21st October, 1912; and in New South Wales, South Australia and Western Australia on 13th January, 1913. The Tasmanian State Savings Bank was absorbed by the Commonwealth Bank in January, 1913, the Queensland State Savings Bank was taken over in 1920 and the New South Wales and Western Australian State Savings Banks in 1931. The Savings Bank Department was separated from the General Bank on 9th June, 1928, and has since then operated independently, publishing its own balance-sheets and profit and loss accounts.

3. **Recent Amalgamations.**—Particulars relating to the absorption by the Commonwealth Savings Bank of the Government Savings Banks of New South Wales, and the State Savings Bank of Western Australia are given in Official Year Book, No. 29.

4. **Extension of Facilities.**—The prime object of the foundation of Savings Banks in Australia was the encouragement of thrift, deposits of one shilling and upwards being accepted; nevertheless the facilities offered, while preserving the original object, have led to developments in another direction. Although depositors may not operate on their accounts by means of cheques, they have practically all the other advantages of a current account in addition to receiving interest on their minimum monthly balances, while no charge is made by the banks for keeping the accounts.

5. **Classification of Depositors' Balances.**—The classification of deposits published by Savings Banks does not permit of a fully detailed analysis with respect to Australia as a whole, but information supplied to the Royal Commission on Monetary and Banking Systems for all Savings Banks except the Hobart Trustee Savings Bank shows that at 30th June, 1936, the amount on deposit in accounts with balances of less than £100 represented 21 per cent. of the total deposits; balances of over £100 but under £250, 21 per cent.; over £250 but under £500, 23 per cent.; over £500 but under £1,000, 25 per cent.; while those of over £1,000 accounted for 10 per cent. School, Penny Bank and small inoperative accounts were excluded in determining the above percentages.

6. **Number of Accounts.**—At 30th June, 1942, the number of Savings Bank accounts in existence were as follows:—Commonwealth Savings Bank—Operative, 2,542,759; Inoperative, 1,446,553; State and Trustee Savings Banks—Operative, 1,627,927; Inoperative, 598,124. Generally, Inoperative Accounts are those with balances of less than £1 which have not been operated on for a period of two years. It should be noted that the figures above relate to the number of accounts and not necessarily to the number of depositors.

7. **Rates of Interest on Deposits.**—The "Premiers' Plan" of 1931 provided, *inter alia*, for the reduction of bank rates of interest on deposits and advances. The Commonwealth Savings Bank reduced the rate of interest on depositors' balances by one per cent. from 1st July, 1931, and the other Savings Banks subsequently took similar action. The statements given hereunder show the rates of interest allowed at 30th June, 1935 to 1942 by State or Trustee Banks and by the Commonwealth Bank.

The table hereunder refers to interest rates allowed by State Savings Banks :—  
STATE AND TRUSTEE SAVINGS BANKS : INTEREST RATES ON DEPOSITS.

Particulars.	State Savings Banks.				Trustee Savings Banks.	
	Victoria.	South Australia. (a)			Hobart.	Launceston.
	£1,000.	£1,000.			£300.	£300.
		£1 to £500.	£501 to £1,000.			
Interest-bearing Limit.	%	%	%	%	%	%
Rates at 30th June—						
1935 .. ..	2 ; 2½ (b)	2½	2½	2½ ; 3 (c)	2½ ; 3 (c)	
1936 .. ..	2 ; 2½ (b)	2½	2½	2½ ; 3 (c)	2½ ; 3 (c)	
1937 .. ..	2 ; 2½ (b)	2½	2½	3 ; 3½ (c)	3 ; 3½ (c)	
1938 .. ..	2 ; 2½ (b)	2½	2½	3 ; 3½ (c)	3 ; 3½ (c)	
1939 .. ..	2 ; 2½ (b)	3 (d) ; 2½ (e)	2½	3 ; 3½ (c)	3 ; 3½ (c)	
1940 .. ..	2 ; 2½ (b)	2½ (d) ; 2½ (e)	2½	3 ; 3½ (c)	3 ; 3½ (c)	
1941 .. ..	2 ; 2½ (b)	2½	2½	2½ ; 3½ (c)	2½ ; 3½ (c)	
1942 .. ..	2 (f) 1½ (g) ; 1½ (b)	2½	1½	2½	2½	

(a) Interest on deposits in accounts closed during the year is generally allotted at a lower rate than that applicable to accounts remaining open. (b) Deposit stock. (c) Deposits fixed for twelve months. (d) On balances up to £200. (e) On balances £201 to £500. (f) On balances £1 to £500. (g) On balances £501 to £1,000.

Particulars regarding the rates allowed by the Commonwealth Savings Bank are shown in the following table :—

COMMONWEALTH SAVINGS BANK : INTEREST RATES ON DEPOSITS.

Rate at 30th June—						£1 to £500.	£501 to £1,300. (a)
						%	%
1935 .. ..	..	..	..	..	..	2	1½
1936 .. ..	..	..	..	..	..	2	1½
1937 .. ..	..	..	..	..	..	2	1½
1938 .. ..	..	..	..	..	..	2	1½
1939 .. ..	..	..	..	..	..	2	1½
1940 .. ..	..	..	..	..	..	2	1½
1941 .. ..	..	..	..	..	..	2	1½
1942 .. ..	..	..	..	..	..	2	1½

(a) Up to 1941 the interest-bearing limit in all States except Queensland was £1,300. In Queensland it was £2,000. The limit since 1942 is £1,000 in all States.

On 1st July, 1932, a reduction of one-quarter of one per cent. in the rate of interest allowed on deposits became effective, followed by a similar reduction from 1st November, 1932. Further reductions of one-quarter of one per cent. operated from 1st June, 1934, and 1st January, 1935, respectively.

From 7th April, 1942, in relation to the Savings Bank of South Australia, and from 1st April, 1942, in relation to every other savings bank, rates of interest on deposits were fixed under National Security Regulations.

For the Commonwealth Savings Banks and the State Savings Bank of Victoria maximum rates were fixed at 2 per cent. on the first £500 and 1½ per cent. on any further balance up to £1,000. On balances in excess of £1,000 no interest is to be paid, except in respect of friendly societies and similar bodies where it has been the custom to pay interest on the full balance. The rate of 2 per cent. is allowed in these cases. Maximum rates for other savings banks were fixed at one-quarter per cent. higher than those for the Commonwealth Savings Bank and the State Savings Bank of Victoria.

8. **Statistical Returns.**—Commencing from July, 1931, monthly returns have been furnished by Savings Bank authorities, and the collated data are disseminated in the form of monthly press notices. In addition, the particulars are published in the *Quarterly Summary of Australian Statistics* and the *Monthly Review of Business Statistics*. The information given in the following paragraphs relates to the deposits at 30th June in each year. For convenience of reference the information has been grouped under the following headings:—

(i) All Savings Banks; (ii) Commonwealth Savings Banks; and (iii) State (including Trustee Banks in Tasmania) Savings Banks.

9. **All Savings Banks.**—(i) *Returns for Year 1941-42.* The following statement gives details of the business transacted by all Savings Banks for the year 1941-42:—

#### ALL SAVINGS BANKS : PARTICULARS, 1941-42.

State or Territory.	Amount on Deposit at 30th June, 1941.	Excess of Deposits over Withdrawals during year.	Interest Added during year.	Amount on Deposit at 30th June, 1942.
	£	£	£	£
New South Wales .. ..	87,750,156	5,248,247	1,539,529	94,537,932
Victoria .. ..	85,689,007	6,997,451	1,539,177	94,225,635
Queensland .. ..	29,089,008	1,612,993	512,437	31,214,438
South Australia .. ..	27,509,705	2,465,525	640,761	30,615,991
Western Australia .. ..	12,521,151	1,077,100	222,888	13,821,139
Tasmania .. ..	8,941,348	326,146	204,285	9,471,779
Northern Territory .. ..	356,590	-357,339	749	(b)
Australian Capital Territory ..	373,815	7,592	6,441	387,848
<b>Total .. ..</b>	<b>252,230,780</b>	<b>17,377,715</b>	<b>4,666,267</b>	<b>274,274,762</b>

(a) Includes deposits transferred from Papua and Territory of New Guinea Branches. (b) Transferred to South Australia.

(ii) *Deposits*—(a) *Years 1938 to 1942.* The following table shows for all Savings Banks the amount at credit of depositors and the average deposits per head of population at 30th June, 1938 to 1942:—

#### ALL SAVINGS BANKS : DEPOSITS.

30th June.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Terr.	A.C.T.	Total.
<b>TOTAL.</b>									
	£	£	£	£	£	£	£	£	£
1938	86,015,685	78,877,000	28,206,457	27,243,657	12,037,486	7,691,510	67,921	292,461	240,432,177
1939	87,473,789	80,461,051	29,044,712	27,397,028	12,396,191	8,396,347	98,814	318,804	245,586,736
1940	82,110,900	79,145,353	28,251,873	26,563,288	11,860,151	8,517,364	191,926	350,234	236,991,089
1941	87,750,156	85,689,007	29,089,008	27,509,705	12,521,151	8,941,348	356,590	373,815	252,230,780
1942	94,537,932	94,225,635	31,214,438	30,615,991	13,821,139	9,471,779	(b)	387,848	274,274,762
<b>PER HEAD OF POPULATION.</b>									
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1938	31 12 9	42 4 11	28 2 4	45 19 11	26 3 2	32 16 11	11 15 5	25 5 11	34 17 7
1939	31 16 11	42 15 4	28 11 6	45 19 9	26 12 8	35 9 7	15 19 4	26 9 0	35 5 7
1940	29 11 9	41 11 6	27 10 7	44 7 11	25 7 0	35 11 10	24 5 7	27 10 7	33 14 2
1941	31 7 5	44 4 2	28 1 3	45 17 10	26 14 2	37 9 1	35 17 7	27 14 10	35 10 3
1942	433 8 5	47 17 2	30 1 6	49 13 9	29 7 8	39 9 6	(b)	31 7 8	38 4 7

(a) See note (a) above.

(b) See note (b) above.

For a number of years prior to the depression deposits were steadily rising and at 30th September, 1929, the aggregate amount was £225,963,165. As the depression developed withdrawals were heavy and the amount on deposit declined to £193,375,397



in June, 1931. (The lowest point, although not actually recorded, was probably reached in May, 1931.) Deposits remained about these low levels until, in June, 1932, with the amount of £197,966,308 there began a steady upward trend, which continued, with minor regressions only, until February, 1940, when deposits amounted to £246,502,625. Two war loans and the war savings certificate scheme were launched during the next five months. This was instrumental in reducing the level of deposits to £236,561,656 in July, 1940. Since then there has been a regular monthly increase, broken only by temporary declines coinciding with further loan raisings. Recent loans, however, have not reduced the level below that of the previous month. At the end of February, 1944, the amount on deposit was £436,398,544.

(b) *Deposits per head and Purchasing Power.* Particulars of the deposits per head of population, actual and adjusted to purchasing power by the application of retail price index-numbers at 30th June, 1928 and in each year from 1933 to 1942, are given in the following table :—

## ALL SAVINGS BANKS : DEPOSITS PER HEAD OF POPULATION.

At 30th June—				Actual.		Adjusted to Purchasing Power. (a)	
				£	Index-Number.	£	Index-Number.
					1928 = 1000		1928 = 1000
1928	..	..	..	34.14	1000	34.14	1000
1933	..	..	..	30.51	894	38.52	1128
1934	..	..	..	31.55	924	39.14	1146
1935	..	..	..	32.41	949	39.77	1165
1936	..	..	..	33.20	972	40.00	1172
1937	..	..	..	33.79	990	39.52	1158
1938	..	..	..	34.88	1022	39.59	1160
1939	..	..	..	35.28	1033	39.07	1144
1940	..	..	..	33.71	987	35.86	1050
1941	..	..	..	35.51	1040	36.05	1056
1942	..	..	..	38.23	1120	35.90	1052

(a) On the basis of the All Items ("C") Series of Retail Price Index-numbers for June quarter in each year.

In interpreting the above figures it should be remembered that Savings Bank accounts are used to some extent by institutions and business people, as well as by individuals for the investment of personal savings. The relative extent to which Savings Bank accounts are used for business purposes, etc., may, and probably does, fluctuate considerably from time to time.

10. *War Savings Certificates.*—In March, 1940, the War Savings Certificate Scheme was inaugurated, the first sales being made on 18th March. Certificates may be purchased in denominations of £1, £5, £10 and £50, the purchase prices being 16s., £4, £8, and £40 respectively. The date of full maturity is seven years after that of issue, but certificates may be cashed at any time, the amounts ranging, in the case of the £1 certificate from 16s. 6d. at the end of the first year and before the end of two years to £1 at the end of seven years. The sales of certificates have been stimulated by the formation of War Savings Certificate Groups, members of which contribute regularly towards the purchase of certificates. The approximate number of these groups registered at the end of February, 1944, was 56,200 and the membership approximately 1,290,000. The total amounts contributed, less amounts repaid to those cashing their certificates, at 30th June of the years 1940, 1941 and 1942, respectively, were £6,099,886, £17,380,098 and £26,170,601. At the end of February, 1944, the net proceeds amounted to £41,176,143.

11. Commonwealth Savings Bank.—(i) *Returns for Year 1941-42.* Returns for the States and Territories for the year 1941-42 are shown in the table below:—

**COMMONWEALTH SAVINGS BANK : RETURNS, 1941-42.**

State or Territory.	Amount on Deposit 30th June, 1941.	Excess of Deposits over Withdrawals during year.	Interest Added during year.	Amount on Deposit 30th June, 1942.
	£	£	£	£
New South Wales .. ..	87,750,156	5,248,247	1,539,529	a94,537,932
Victoria .. ..	13,942,267	2,711,624	255,672	16,909,563
Queensland .. ..	29,089,008	1,612,993	512,437	31,214,438
South Australia .. ..	3,509,004	1,105,191	70,071	4,684,266
Western Australia .. ..	12,521,151	1,077,100	222,888	13,821,139
Tasmania .. ..	2,423,313	238,579	43,282	2,705,174
Northern Territory .. ..	356,590	—357,339	749	(b)
Australian Capital Territory ..	373,815	7,592	6,441	387,848
<b>Total .. ..</b>	<b>149,065,304</b>	<b>11,643,987</b>	<b>2,651,069</b>	<b>164,260,360</b>

(a) Includes deposits transferred from Papua and Territory of New Guinea Branches. (b) Transferred to South Australia.

(ii) *Deposits—Years 1938 to 1942.* The amount on deposit with the Commonwealth Savings Bank in each State, in the Territories of Papua and New Guinea, and in London, at 30th June in each of the years 1938 to 1942 was as follows:—

**COMMONWEALTH SAVINGS BANK : DEPOSITS, 30TH JUNE.**

Place of Deposit.	1938.	1939.	1940.	1941.	1942.
	£	£	£	£	£
New South Wales .. ..	86,015,685	87,473,789	82,110,900	87,750,156	94,537,932
Victoria .. ..	10,734,968	11,242,366	11,784,730	13,942,267	16,909,563
Queensland .. ..	28,206,457	29,044,712	28,251,873	29,089,008	31,214,438
South Australia .. ..	3,091,789	3,166,990	3,093,912	3,509,004	4,684,266
Western Australia .. ..	12,037,486	12,396,191	11,860,151	12,521,151	13,821,139
Tasmania .. ..	2,220,186	2,357,983	2,297,110	2,423,313	2,705,174
Northern Territory .. ..	67,921	98,814	19,926	356,590	(a)
Australian Capital Territory ..	292,461	318,804	350,234	373,815	387,848
<b>Total .. ..</b>	<b>142,666,953</b>	<b>146,099,649</b>	<b>139,940,836</b>	<b>149,965,304</b>	<b>164,260,360</b>
Papua and New Guinea (b) ..	215,864	209,570	205,885	226,369	(c)
London (d) .. ..	550,307	571,279	386,818	362,114	359,209
<b>Grand Total .. ..</b>	<b>143,433,124</b>	<b>146,880,498</b>	<b>140,533,539</b>	<b>150,553,787</b>	<b>164,619,569</b>

(a) Transferred to South Australia. (b) Not included in the figures given in paras. 9 (i) and (ii) and 11 (i) prior to 1942. (c) Transferred to New South Wales. (d) Not included in the figures given in paras. 9 (i) and (ii) and 11 (i).

(iii) *Balance-sheet, 30th June, 1942.* Particulars of the liabilities and assets of the Commonwealth Savings Bank as at 30th June, 1942, were as follows:—

**COMMONWEALTH SAVINGS BANK.(a) : BALANCE-SHEET, 30TH JUNE, 1942.**

Liabilities.	Assets.
Reserve Fund .. ..	Coin, Cash Balances and Money
Depositors' Balances ..	at Short Call .. ..
Contingency Account and	Australian Notes .. ..
other Liabilities .. ..	Government Securities ..
	Securities of Municipal and
	Other Public Authorities ..
	Bank Premises .. ..
	Other Assets .. ..
<b>Total .. ..</b>	<b>Total .. ..</b>

(a) Includes London, Papua and Territory of New Guinea Branches.

(iv) *Profits.* Under the terms of the Savings Bank Amalgamation Agreements the profits of the Commonwealth Savings Bank in New South Wales, Queensland, Western Australia and Tasmania are equally divided between the Bank and the former controlling authorities in those States. After £240,532 had been so provided, the net profit of the Commonwealth Savings Bank during 1941-42 was £368,754, one-half of which was paid to the National Debt Sinking Fund and the remainder carried to reserves. The aggregate net profit from the inception of the bank to 30th June, 1942, was £6,021,324.

12. *State Savings Bank.*—(i) *Returns for 1941-42.* Particulars of the transactions of all State Savings Banks for the year 1941-42 are given hereunder. Throughout the following tables the figures for Tasmania refer to the Trustee Savings Banks in Hobart and Launceston. Although the accounts of these institutions are made up for half-yearly periods ending 28th February and 31st August, the managements have furnished particulars of deposits as at 30th June.

## STATE SAVINGS BANKS : RETURNS, 1941-42.

State.	Amount on Deposit at 30th June, 1941.	Excess of Deposits over Withdrawals during year.	Interest added during year.	Amount on Deposit at 30th June, 1942.
	£	£	£	£
Victoria .. ..	71,746,740	4,285,827	1,283,505	77,316,072
South Australia ..	24,000,701	1,360,334	570,690	25,931,725
Tasmania (a) ..	6,518,035	87,567	161,003	6,766,605
Total .. ..	102,265,476	5,733,728	2,015,198	110,014,402

(a) Trustee Savings Banks, Hobart and Launceston.

NOTE.—The State Savings Banks in New South Wales, Queensland, Western Australia and Tasmania have been absorbed by the Commonwealth Savings Bank.

(ii) *Deposits.*—Years 1938 to 1942. The following statement shows the amount on deposit with State Savings Banks at 30th June in each of the years 1938 to 1942 :—

## STATE SAVINGS BANKS : DEPOSITS, AT 30TH JUNE.

State.	1938.	1939.	1940.	1941.	1942.
	£	£	£	£	£
Victoria .. ..	68,142,032	69,218,685	67,360,623	71,746,740	77,316,072
South Australia ..	24,151,868	24,230,038	23,469,376	24,000,701	25,931,725
Tasmania (a) ..	5,471,324	6,038,364	6,220,254	6,518,035	6,766,605
Total .. ..	97,765,224	99,487,087	97,050,253	102,265,476	110,014,402

(a) Trustee Savings Banks, Hobart and Launceston.



(iii) *Assets, 1941-42.* At 30th June, 1942, the assets of all State Savings Banks amounted to £121,714,183, distributed as shown hereunder :—

**STATE SAVINGS BANKS : ASSETS, 30th JUNE, 1942.**

Particulars.	Victoria.	South Australia.	Tasmania. (a)	Total.
	£	£	£	£
Government Securities .. ..	37,955,937	14,737,025	2,676,960	55,369,922
Municipal Securities .. ..	17,575,554	372,734	1,295,852	19,501,636
Other Public Securities .. ..		199,311	58,185	
Mortgages .. ..	2,206,778	5,079,494	1,771,429	9,057,701
Outstanding Interest, Dividends and Rents .. ..	649,555	205,288	67,282	922,125
Landed and House Property ..	824,718	344,596	32,000	1,201,314
Fixed Deposits .. ..	21,928,000	6,082,750	1,072,000	29,082,750
Cash in hand, in transit and on Current Account .. ..	4,316,653	1,667,202	581,719	6,565,574
All other Assets .. ..	9,612	585	3,864	14,061
<b>Total Assets .. ..</b>	<b>85,465,907</b>	<b>28,688,985</b>	<b>7,559,291</b>	<b>121,714,183</b>

(a) At 31st August, 1942. See par. 12 (i).

(iv) *Profit and Loss Accounts, 1941-42.* Details of the Profit and Loss Accounts of the several State Savings Banks for the year 1941-42 are given in the following table :—

**STATE SAVINGS BANKS : PROFIT AND LOSS ACCOUNTS FOR YEAR  
ENDED 30th JUNE, 1942.**

Particulars.	Victoria.	South Australia.	Tasmania. (a)	Total.
	£	£	£	£
<i>Dr.</i>				
Interest allotted to Depositors ..	1,283,505	570,690	169,376	2,023,571
Provision for accrued Interest on Depositors' Balances .. ..	147,538	50,000	..	197,538
Amount carried to Reserves and Depreciation Funds .. ..	295,000	169,724	25,000	489,724
Writing off Bank Premises .. ..	24,300	(b)	5,066	29,366
Expenses of Management .. ..	594,356	174,236	46,440	815,032
All other Expenses .. ..	68,204	24,745	(c) 10,284	103,233
Balance carried forward .. ..	164,245	130,154	95,439	389,838
<b>Total .. ..</b>	<b>2,577,148</b>	<b>1,119,549</b>	<b>351,605</b>	<b>4,048,302</b>
<i>Cr.</i>				
Balance brought forward .. ..	154,663	(d) 183,642	94,213	432,518
Interest, Dividends, Rents, and all other Receipts .. ..	2,422,485	935,907	257,392	3,615,784
<b>Total .. ..</b>	<b>2,577,148</b>	<b>1,119,549</b>	<b>351,605</b>	<b>4,048,302</b>

(a) Year ended 31st August, 1942; see par. 12 (i). (b) Bank premises written off from Reserve Fund. (c) Includes payments of and provision for State Income Tax, £6,284. (d) Includes Reserve brought forward from 1940-41 (provision for Interest accrued on Depositors' Balances from 7th to 30th June, 1941, £50,000).

**C. COMPANIES.**

**§ 1. General.**

Statistics available in regard to registered companies embrace (a) Returns (up to 1940 only) relating to Trustees, Executors and Agency Companies; (b) Returns relating to Registered Building and Investment Societies; and (c) Returns relating to Registered Co-operative Societies.

**§ 2. Trustees, Executors and Agency Companies.**

The following table shows, for the years 1938 to 1942, particulars of the assets and liabilities of certain trustee companies transacting business in Australia and New Zealand. Figures for the years 1938 to 1940 have been obtained from returns supplied to this office,

while those for the years 1941 and 1942 have been extracted from the *Australasian Insurance and Banking Record*. Individual items are therefore not entirely comparable. Details of assets of trust funds administered are shown for the years 1938 to 1940, but for the last two years totals only for nine offices are available.

## TRUSTEES, EXECUTORS AND AGENCY COMPANIES, AUSTRALIA.

Particulars.	1938.	1939.	1940.	1941.	1942.
Number of Companies .. ..	20	20	21	23	23
Liabilities—	£	£	£	£	£
Capital paid-up .. ..	1,312,202	1,312,202	1,355,952	1,408,452	1,408,452
Reserves and undistributed Profits ..	1,221,589	1,235,750	1,310,141	1,293,850	1,302,802
Other Liabilities .. ..	212,201	150,960	136,122	634,174	660,273
Total Liabilities .. ..	2,745,992	2,698,912	2,802,215	3,336,476	3,371,527
Assets—					
Government and Municipal Securities ..	753,234	730,935	752,134	41,083,288	4 940,739
Loans on Mortgage .. ..	392,973	397,944	414,576	474,250	536,652
Other Loans and Advances .. ..	94,324	75,141	80,366	151,626	152,973
Real Property .. ..	1,140,669	1,148,566	1,202,612	1,082,585	1,084,627
Deposits in Banks .. ..	139,571	147,717	177,922	(b) 126,425	(b) 200,026
Other Assets .. ..	225,221	198,609	174,605	418,302	456,510
Total Assets .. ..	2,745,992	2,698,912	2,802,215	3,336,476	3,371,527
Assets of Trust Funds Administered—(c)	£'000.	£'000.	£'000.	£'000.	£'000.
Australian Government and Municipal Securities .. ..	67,260	68,515	71,734	} Not available.	
British and Foreign Government and Municipal Securities .. ..	1,304	1,342	1,340		
Loans on Mortgage .. ..	30,957	30,977	32,507		
Other Loans and Advances .. ..	2,723	2,713	2,177		
Shares in Companies .. ..	56,750	59,351	61,972		
Real Property .. ..	51,041	51,732	53,853		
Deposits in Banks .. ..	8,797	8,958	8,995		
Other Assets .. ..	13,480	13,409	15,717		
Total Trust Fund Assets .. ..	232,312	236,997	248,295	(d) 157,508	(d) 161,068

(a) Includes fixed deposits.

(b) Cash.

(c) Includes particulars of trust funds administered

by Public Trustees.

(d) Nine offices only.

## § 3. Registered Building and Investment Societies.

1. Summary.—Returns have been received relating to 325 Societies, but the information is not exhaustive, as particulars regarding unimportant organizations are not included. Compilation of these statistics have been discontinued in New South Wales and South Australia for the duration of the war. The figures shown relate to the latest year for which information is available.

## REGISTERED BUILDING AND INVESTMENT SOCIETIES: SUMMARY.

Particulars.	N.S.W. 1939-40.	Vic. 1941.	Q'land. 1940-41.	S. Aust. 1940.	W. Aust. 1940-41.	Tas. 1940-41.	Total.
Societies making returns—							
Permanent .. No.	7	21	7	6	7	4	52
Terminating .. No.	248	2	5	13	5	..	273
Total .. No.	255	23	12	19	12	4	325
Number of Shareholders ..	(a) 41,929	10,191	14,976	10,532	19,546	5,524	102,698
„ shares ..	(b) 457,217	847,932	1,098,733	41,629	(c)	49,878	2,495,389
„ borrowers ..	(e) 6,133	14,904	7,856	2,773	4,402	1,876	37,944
Income for year from							
Interest, etc. .. £	678,354	448,546	137,702	29,705	114,037	45,085	1,453,429
Working expenses for year £	133,657	263,963	133,289	9,860	15,791	6,859	563,419
Amount of deposit during year .. £	379,768	544,995	89,818	123,589	282,370	16,687	1,437,227
Repayment of loans during year ..	649,332	1,316,349	439,253	88,812	356,906	130,756	2,981,408
Loans granted during year £	3,819,552	1,218,447	306,906	86,979	305,740	125,681	5,851,105

(a) Includes 17,877 shareholders in Star Bowkett and 20,672 in other terminating societies.

(b) Includes 154,157 shares in Star Bowkett and 264,175 in other terminating societies and excludes 2 investment societies.

(c) Not available.

(d) Excludes Western Australia.

(e) Permanent Societies only.

(f) Includes £3,165,174 for other terminating societies.

2. **Liabilities and Assets.**—The balance-sheets of the companies in respect of which particulars of liabilities and assets are stated hereunder relate to the periods shown above.

### REGISTERED BUILDING AND INVESTMENT SOCIETIES : LIABILITIES.

State.	Paid-up Capital or Subscriptions.	Reserve Funds.	Deposits.	Bank Overdrafts and other Liabilities.	Total Liabilities.
	£	£	£	£	£
New South Wales ..	2,970,813	692,147	764,619	<i>a</i> 9,832,182	14,259,761
Victoria .. ..	2,333,000	1,079,094	2,950,069	380,167	6,742,330
Queensland .. ..	2,028,720	67,573	17,262	102,698	2,216,253
South Australia ..	580,607	106,534	114,644	7,464	809,249
Western Australia ..	1,499,126	25,100	100,104	92,047	1,716,377
Tasmania .. ..	445,363	115,210	218,288	18,082	796,943
Total .. ..	9,857,629	2,085,658	4,164,986	10,432,640	26,540,913

(a) Includes £9,580,297 for other terminating societies.

### REGISTERED BUILDING AND INVESTMENT SOCIETIES : ASSETS.

State.	Advances on Mortgage.	Landed and House Pro- perty, Furni- ture, etc.	Cash in Hand and on Deposit and other Assets	Total Assets.
	£	£	£	£
New South Wales .. ..	<i>a</i> 13,638,924	(b) 228,111	392,726	14,259,761
Victoria .. ..	6,350,687	137,738	253,905	6,742,330
Queensland .. ..	2,156,869	16,864	42,520	2,216,253
South Australia .. ..	715,203	25,856	68,190	809,249
Western Australia .. ..	1,548,862	20,472	147,043	1,716,377
Tasmania .. ..	662,808	9,450	124,685	796,943
Total .. ..	25,073,353	438,491	1,029,069	26,540,913

(a) Includes £10,688,125 for other terminating societies.

(b) Permanent societies only.

## § 4. Co-operative Societies.

1. **General.**—Prior to 1931 the returns relating to Co-operative Societies were divided into two classes—(i) those engaged in the manufacture and marketing of primary products and trade requirements; and (ii) those engaged in retailing general household requirements. The former may be described briefly as Producers' Co-operative Societies and



the latter as Consumers' Co-operative Societies. Particulars of those Producers' Societies which are also Consumers' Societies were compiled separately for the first time for the year 1931. The particulars given for New South Wales relate to societies registered under the Co-operation Act 1923-1938. The latest figures available for New South Wales and South Australia, owing to the temporary suspension of the compilation of these statistics, relate to the years 1939-40 and 1940 respectively.

## CO-OPERATIVE SOCIETIES ; SUMMARY.

Particulars.	N.S.W. 1939-40. (a)	Vic. 1940-41.	Q'land. 1940-41.	S.A. 1940.	W.A. 1940-41. (b)	Tas. 1940-41.	Total.
Number of Societies ..	129	57	115	36	37	11	385
" Branches ..	(b)	21	57	2	24	20	(c)124
" Members ..	57,268	36,189	62,206	8,339	13,073	8,360	185,435
Gross Turnover (Sales) £	18,371,770	4,387,305	13,360,562	1,090,509	1,752,805	626,257	39,589,208
Other Income .. £	104,648	310,503	386,322	173,733	664,919	26,144	1,666,269
Total Income .. £	18,476,418	4,697,808	13,746,884	1,264,242	2,417,724	652,401	41,255,477
Total Purchases during Year £	15,402,266	3,777,711	10,928,701	893,595	1,570,626	476,078	33,048,977
Other Expenditure .. £	2,738,533	826,534	2,625,502	300,170	720,602	176,735	7,448,076
Total Expenditure .. £	18,140,799	4,604,245	13,554,203	1,253,765	2,291,228	652,813	40,497,053
Rebates and Bonuses .. £	..	19,605	37,646	41,251	2,363	4,338	105,203
Dividends on Share Capital £	38,180	18,642	35,895	9,048	13,114	2,753	117,632

## CONSUMERS' SOCIETIES.

Number of Societies ..	43	21	12	8	5	3	92
" Branches ..	(b)	9	10	43	..	1	(c)63
" Members ..	44,933	10,852	6,151	45,015	2,715	557	110,223
Gross Turnover (Sales) £	2,832,160	745,280	420,108	1,111,654	171,758	67,904	5,348,864
Other Income .. £	52,455	18,655	4,391	22,762	3,587	746	102,596
Total Income .. £	2,884,615	763,935	424,499	1,134,416	175,345	68,650	5,451,460
Total Purchases during Year £	2,202,589	617,000	381,856	800,819	140,944	55,816	4,289,024
Other Expenditure .. £	535,161	105,886	43,091	204,036	32,307	12,916	933,397
Total Expenditure .. £	2,737,750	722,886	424,947	1,094,855	173,251	68,732	5,222,421
Rebates and Bonuses .. £	185,472	33,735	1,856	52,339	862	784	275,048
Dividends on Share Capital £	18,786	4,652	1,000	16,013	1,583	290	42,324

## SOCIETIES WHICH ARE BOTH PRODUCERS' AND CONSUMERS'.

Number of Societies ..	..	8	4	3	43	..	58
" Branches ..	..	5	9	1	12	..	27
" Members ..	..	4,506	4,604	591	5,875	..	15,576
Gross Turnover (Sales) £	..	1,198,653	1,041,821	149,735	624,213	..	3,014,422
Other Income .. £	..	8,715	10,111	30,643	29,943	..	79,412
Total Income .. £	..	1,207,368	1,051,932	180,378	654,156	..	3,093,834
Total Purchases during Year £	..	1,047,380	899,109	149,535	542,849	..	2,638,933
Other Expenditure .. £	..	140,709	130,205	24,045	97,832	..	392,791
Total Expenditure .. £	..	1,188,089	1,029,374	173,580	640,681	..	3,031,724
Rebates and Bonuses .. £	..	11,881	3,077	5,019	12,247	..	32,224
Dividends on Share Capital £	..	1,192	2,043	1,452	4,400	..	9,087

(a) Particulars relate to Societies registered under Co-operation Act 1923-1938. Particulars shown under Producers' Societies refer to Rural Societies, and under Consumers of Trading. (b) Not available. (c) Excludes New South Wales.

2. Liabilities and Assets.—The next table gives the liabilities and assets :—

### CO-OPERATIVE SOCIETIES : LIABILITIES AND ASSETS.

Particulars.	N.S.W.(a) 1939-40.	Vic. 1940-41.	Qld. 1940-41.	S.A. 1940.	W.A. 1940-41.	Tas. 1940-41.	Total.
<b>PRODUCERS' SOCIETIES.</b>							
<b>Liabilities—</b>	£	£	£	£	£	£	£
Paid-up Capital ..	1,007,101	971,507	1,361,001	201,753	272,032	92,035	4,000,319
Loan Capital ..	(b)	111,100	678,910	264,640	210,260	47,195	1,312,435
Bank Overdrafts ..	1,029,716	681,143	980,607	165,823	24,777	68,137	2,953,293
Accumulated Profits ..	1,148,546	139,525	239,621	85,335	6,906	14,501	4,347,194
Reserve Funds ..		329,159	1,772,002	368,825	208,812	33,872	
Sundry Creditors ..	1,660,258	383,463	2,233,760	340,508	302,753	63,605	6,165,975
Other Liabilities ..		101,347	127,354	401,256	155,400	6,181	
<b>Total Liabilities ..</b>	<b>4,935,621</b>	<b>2,720,544</b>	<b>7,397,455</b>	<b>1,918,140</b>	<b>1,481,030</b>	<b>325,526</b>	<b>18,779,216</b>
<b>Assets—</b>							
Land and Buildings ..	2,497,189	1,198,687	1,390,268	216,357	420,964	112,897	9,375,998
Machinery, Plant and other fixed Assets ..			2,906,042	349,887	216,520	67,187	
Stocks ..	723,602	390,133	667,251	874,111	162,052	57,176	2,875,825
Sundry Debtors ..	1,080,645	783,055	2,000,416	109,586	369,605	66,734	4,425,041
Cash in hand and on deposit ..	147,299	110,359	152,427	13,827	165,915	10,399	600,256
Profit and Loss Account ..	480,886	52,407	20,661	10,425	44,723	3,857	1,502,096
Other Assets ..		185,603	242,300	343,047	101,221	6,970	
<b>Total Assets ..</b>	<b>4,935,621</b>	<b>2,720,544</b>	<b>7,397,455</b>	<b>1,918,140</b>	<b>1,481,030</b>	<b>325,526</b>	<b>18,779,216</b>

### CONSUMERS' SOCIETIES.

<b>Liabilities—</b>	£	£	£	£	£	£	£
Paid-up Capital ..	641,158	162,584	51,264	438,907	37,425	20,608	1,351,946
Loan Capital ..	(b)	39,602	8,488	102,403		6,417	(c) 157,000
Bank Overdrafts ..	90,529	70,254	29,587	33,411	4,008	4,299	232,088
Accumulated Profits ..	435,310	24,265	9,206	45,593	4,019	1,775	802,119
Reserve Funds ..		90,787	26,600	150,825	5,035	8,794	
Sundry Creditors ..	202,102	47,537	32,033	32,105	15,096	6,184	439,007
Other Liabilities ..		7,409	1,337	3,660	471	1,073	
<b>Total Liabilities ..</b>	<b>1,459,099</b>	<b>442,498</b>	<b>158,515</b>	<b>806,904</b>	<b>66,054</b>	<b>49,090</b>	<b>2,982,160</b>
<b>Assets—</b>							
Land and Buildings ..	528,704	152,194	27,491	292,171	10,002	17,734	1,088,366
Machinery, Plant and other fixed Assets ..			8,082	42,427	6,795	2,746	
Stocks ..	445,384	125,653	55,142	292,196	27,555	17,497	963,427
Sundry Debtors ..	253,018	91,662	57,887	67,809	10,231	7,168	487,775
Cash in hand and on deposit ..	98,418	50,836	4,274	34,180	7,487	2,702	197,897
Profit and Loss Account ..	133,575	3,049	3,381	3,075	1,241	1,083	244,695
Other Assets ..		19,104	2,258	75,040	2,740	140	
<b>Total Assets ..</b>	<b>1,459,099</b>	<b>442,498</b>	<b>158,515</b>	<b>806,904</b>	<b>66,054</b>	<b>49,090</b>	<b>2,982,160</b>

### SOCIETIES WHICH ARE BOTH PRODUCERS' AND CONSUMERS'.

<b>Liabilities—</b>	£	£	£	£	£	£	£
Paid-up Capital ..		60,966	71,262	20,219	158,787		311,234
Loan Capital ..		12,622	2,426	803	14,749		30,600
Bank Overdrafts ..		53,868	64,806	241	32,603		151,518
Accumulated Profits ..		51,049	5,461	1,982	11,889		70,381
Reserve Funds ..		76,521	47,844	20,800	108,408		253,573
Sundry Creditors ..		53,875	97,756	8,839	56,684		217,154
Other Liabilities ..		5,524	9,211	24,737	1,410		40,882
<b>Total Liabilities ..</b>		<b>314,425</b>	<b>298,766</b>	<b>77,621</b>	<b>384,530</b>		<b>1,075,342</b>
<b>Assets—</b>							
Land and Buildings ..			83,898	8,703	79,313		430,954
Machinery, Plant and other fixed Assets ..		146,206	78,945	10,061	23,828		
Stocks ..		68,848	54,962	16,495	160,930		301,235
Sundry Debtors ..		53,604	58,587	18,591	88,772		221,554
Cash in hand and on deposit ..		6,519	3,011	1,766	17,951		29,247
Profit and Loss Account ..			226		4,058		4,284
Other Assets ..		37,248	10,137	22,005	9,678		88,068
<b>Total Assets ..</b>		<b>314,425</b>	<b>298,766</b>	<b>77,621</b>	<b>384,530</b>		<b>1,075,342</b>

(a) Particulars relate to Societies registered under Co-operation Act 1923-1938. Particulars shown under Producers' Societies refer to Rural Societies, and under Consumers to Trading. (b) Not available. (c) Excludes New South Wales.

## D. INSURANCE.

## § 1. General.

Although insurance business is conducted under State laws where such laws are in existence, or otherwise under various Companies Acts or Special Acts, Section 51 of the Commonwealth Constitution confers the necessary powers on the Commonwealth Parliament to legislate in regard to "insurance other than State insurance; also State insurance extending beyond the limits of the State concerned." Legislation by the Commonwealth Parliament includes the Life Assurance Companies Act 1905 limiting the amount of assurance payable on the death of children, the Marine Insurance Act 1909 defining the limits of marine insurance and regulating the terms of contracts, etc., and the Insurance Act 1932-1937, the principal features of which are given hereunder.

Companies, persons or associations of persons carrying on insurance business in Australia or in any Territory of Australia are required to deposit money or approved securities with the Commonwealth Treasurer, to the extent specified in the schedule.

Money deposited is to be invested by the Treasurer in prescribed securities according to the selection of the depositor, and all interest accruing on deposits or securities is to be paid to depositors. Deposits are to remain as security against liability to policy-holders, and are to be available to satisfy judgments obtained in respect of policies.

If the value of money and approved securities deposited has depreciated below the value required by the Act, the Treasurer may require the depositor to lodge additional deposits to bring the total to the prescribed value.

After this Act became law, State laws governing insurance deposits ceased to operate. Deposits held by States on 1st February, 1932, could, however, remain with the States subject to the conditions embodied in the laws of the States. Whilst deposits so remained with the State, the depositors, to the extent of the value of their deposits, were exempt from liability to make deposits under the Commonwealth Act, and the conditions of State laws continued to apply to the deposits until the Commonwealth Treasurer required their return to depositors who immediately had to make deposits with the Commonwealth Government to the prescribed extent.

The following are not regarded as insurance businesses under the Act :—

Staff superannuation schemes ;  
Schemes of religious organizations solely for insurance of their property ; and  
Friendly Society, Union and Association schemes involving superannuation or insurance benefits to employees.

This Act does not apply to State insurance within the limits of the State concerned.

The following shows particulars of deposits under the Insurance Act 1932, at 30th June, 1942 :—

## DEPOSITS UNDER INSURANCE ACT, 30th JUNE, 1942.

Class of Insurance.	Deposited with Government of—		Total.
	Commonwealth.	States.	
	£	£	£
Life .. .. .	455,639	846,974	1,302,613
Other .. .. .	815,480	1,860,950	2,676,430
<b>Total .. .. .</b>	<b>1,271,119</b>	<b>2,707,924</b>	<b>3,979,043</b>



The deposits comprise cash £634,645, government and municipal securities £2,832,688, fixed deposits £12,000, bank guarantees and undertakings £109,810, titles and mortgages £389,900.

## § 2. Life Assurance.

1. **General.**—Since 1907 statistical returns have been collected from life assurance institutions, with results which are in the main satisfactory. The results for each of the earlier years are shown in the several Official Year Books and *Finance Bulletins*. The figures in the succeeding paragraphs refer to Australian business only, except where otherwise indicated.

2. **Institutions Transacting Business.**—(i) *General.* The number of institutions transacting life assurance business in Australia during 1941 was 26, including four oversea companies. Of the twenty-two Australian institutions, six are purely mutual, including one which transacts general business in respect of which share capital is used, and fifteen are public companies. One office is a State Government institution.

(ii) *Ordinary and Industrial Business.* Of the total institutions, thirteen transacted both ordinary and industrial business. Ordinary and industrial business has, where possible, been kept separate, and figures relating to companies whose head offices are outside Australia have been restricted to the Australian, and, in the case of one company, Australasian, business.

3. **Australian Business.** (i) *Ordinary.* (a) 1941. The following table shows particulars for each class of policy in existence during 1941. The amount assured in 1941 represents an average of nearly £65 per head of population.

### ORDINARY LIFE ASSURANCE : AUSTRALIAN BUSINESS, 1941.

Class of Policy.					No. of Policies.	Sum Assured.	Average per Policy.
					No.	£	£
Assurances—							
Whole Life	..	..	..	..	454,285	232,531,178	501
Endowment	..	..	..	..	783,494	191,837,795	245
Other	..	..	..	..	32,955	26,519,058	805
Endowments	..	..	..	..	58,949	12,324,976	209
Total	..	..	..	..	1,339,683	463,213,007	346
Annuities					5,167	(a) 562,364	109

(a) Amount per annum.

(b) 1937 to 1941. Similar particulars for each of the last five years are shown below. The increase in annuities in 1939 is due to the inclusion of a staff pension scheme providing deferred annuities commencing at retirement and temporary assurance in the event of death prior to retirement.

## ORDINARY LIFE ASSURANCE 1937 TO 1941 : AUSTRALIAN BUSINESS.

Year.	Assurance and Endowment Policies.				Annuities.	
	Policies in Force.	Amount.	Average per Policy.	Annual Premium Income.	No.	Amount per Annum.
	No.	£	£	£		£
1937 ..	1,116,033	380,134,886	341	12,634,971	3,549	376,052
1938 ..	1,181,412	403,813,927	342	13,279,373	3,681	(a) 314,499
1939 ..	1,243,378	427,291,072	344	13,954,391	3,826	384,584
1940 ..	1,285,044	442,903,695	345	14,556,318	4,497	468,195
1941 ..	1,339,683	463,213,007	346	15,213,000	5,167	562,364

(a) Particulars of certain contingent annuities formerly included under this heading have been reclassified and excluded, commencing with this year.

(ii) *Industrial.* (a) 1941. Information in regard to industrial business in existence during 1941, nearly £18 per head of population, is given in the following table :—

## INDUSTRIAL LIFE ASSURANCE : AUSTRALIAN BUSINESS 1941.

Class of Policy.				Policies in Force.	Sum Assured.	Average per Policy.
				No.	£	£
Assurances—						
Whole Life ..	..	..	..	171,893	4,223,225	25
Endowment ..	..	..	..	2,498,118	118,115,387	47
Other ..	..	..	..	..	..	..
Endowments ..	..	..	..	110,420	4,156,287	38
Total ..	..	..	..	2,780,431	126,494,899	45
Annuities ..	..	..	..	2	(a) 58	(a) 29

(a) Amount per annum.

(b) 1937 to 1941. Particulars for each of the last five years are shown below :—

## INDUSTRIAL LIFE ASSURANCE 1937 TO 1941 : AUSTRALIAN BUSINESS.

Year.	Assurance and Endowment Policies.				Annuities.	
	Policies in Force.	Amount.	Average per Policy.	Annual Premium Income.	No.	Amount per Annum.
	No.	£	£	£		£
1937 ..	2,253,863	99,544,760	44	5,691,704	2	58
1938 ..	2,368,340	105,452,157	45	6,094,667	2	58
1939 ..	2,491,742	111,861,680	45	6,490,164	2	58
1940 ..	2,610,184	117,555,011	45	6,916,380	2	58
1941 ..	2,780,431	126,494,899	45	7,304,844	2	58

4. Receipts and Expenditure.—(i) *Ordinary Business.* The following table shows the aggregate Australian receipts for the last five years of all the institutions doing business in Australia. In the latest year premiums—new, renewal and annuity—amounted to over 65 per cent., and interest, dividends and rent to nearly 35 per cent. of the Australian receipts.

#### ORDINARY LIFE ASSURANCE : AUSTRALIAN RECEIPTS.

Heading.	1937.	1938.	1939.	1940.	1941.
	£	£	£	£	£
Premiums—New ..	1,886,633	1,653,395	1,613,219	1,483,046	1,588,124
Renewal ..	10,748,338	11,625,978	12,341,172	13,073,272	13,624,876
Annuity Premiums ..	268,399	197,200	183,866	259,704	386,014
Interest, dividends and rents ..	6,778,610	7,173,402	7,546,589	7,911,152	8,195,562
Other receipts ..	76,238	15,374	13,192	15,328	13,650
Total Receipts ..	19,758,218	20,665,349	21,698,038	22,742,502	23,808,226

In 1941 claims accounted for 61 per cent. of the total expenditure; surrenders 13 per cent.; expenses of management 8 per cent.; commission 6 per cent.; and licence fees and taxes 3 per cent.

#### ORDINARY LIFE ASSURANCE : AUSTRALIAN EXPENDITURE.

Heading.	1937.	1938.	1939.	1940.	1941.
	£	£	£	£	£
Claims ..	7,373,965	7,417,756	7,935,462	8,042,627	8,860,562
Surrenders ..	1,574,087	1,698,860	1,842,516	1,922,695	1,815,508
Annuities ..	213,386	214,255	219,473	226,965	257,664
Commission ..	1,015,820	1,004,844	1,007,721	907,983	936,696
Expenses of management ..	1,132,610	1,136,674	1,178,073	1,161,726	1,195,003
Licence fees and taxes	246,669	264,467	316,335	367,630	499,361
Shareholders' dividends	92,319	96,963	101,437	86,129	91,937
Cash bonuses paid to policy-holders ..	242,924	259,319	260,435	279,336	235,376
All other expenditure	227,239	255,427	(a) 1,185,284	(a) 1,175,635	(a) 516,525
Total Expenditure	12,119,019	12,348,565	14,046,736	14,170,726	14,408,632

(a) Includes large provision for taxation and other special purposes.

The excess of receipts over expenditure during the past five years was as follows:—1937, £7,639,199; 1938, £8,316,784; 1939, £7,651,302; 1940, £8,571,776; and 1941, £9,399,594. During the same years the proportions that expenditures bore to receipts were as follows:—1937, 61 per cent.; 1938, 60 per cent.; 1939, 65 per cent.; 1940, 62 per cent.; and 1941, 61 per cent.



(ii) *Industrial Business.* The aggregate Australian receipts for the years 1937 to 1941 of institutions transacting industrial business were as follows:—

## INDUSTRIAL LIFE ASSURANCE : AUSTRALIAN RECEIPTS.

Heading.	1937.	1938.	1939.	1940.	1941.
	£	£	£	£	£
Premiums—New and Renewal .. ..	5,691,704	6,094,667	6,490,164	6,916,380	7,304,844
Interest, dividends and rents .. ..	1,506,503	1,631,831	1,751,531	1,831,919	1,918,171
Other receipts .. ..	42,342	44,659	46,402	49,166	50,478
Total Receipts ..	7,240,549	7,771,157	8,288,097	8,797,465	9,273,493

Expenditure during 1941 totalled £6,850,463, of which claims amounted to over 54 per cent., commission to over 20 per cent., and expenses of management to over 11 per cent.

## INDUSTRIAL LIFE ASSURANCE : AUSTRALIAN EXPENDITURE.

Heading.	1937.	1938.	1939.	1940.	1941.
	£	£	£	£	£
Claims .. ..	2,499,247	2,754,027	3,132,459	3,474,943	3,707,043
Surrenders .. ..	182,210	194,547	498,932	500,097	400,058
Annuities .. ..	36	36	33	36	36
Commission .. ..	1,212,596	1,236,077	1,353,938	1,348,888	1,405,323
Expenses of management .. ..	642,528	681,294	717,794	743,193	767,489
Licence fees and taxes	58,367	68,210	83,259	102,459	153,381
Shareholders' dividends	63,446	55,313	56,476	57,715	57,822
All other expenditure	123,161	128,856	(a) 243,786	(a) 416,138	(a) 359,311
Total Expenditure	4,781,591	5,118,360	6,086,677	6,643,469	6,850,463

(a) Includes large provisions for taxation and other special purposes.

The excess of receipts over expenditure for each of the last five years was:—1937, £2,458,958; 1938, £2,652,797; 1939, £2,201,420; 1940, £2,153,996; and 1941, £2,423,030.

The proportions that expenditure bore to receipts were—1937, 66 per cent.; 1938, 66 per cent.; 1939, 73 per cent.; and 1940, 76 per cent.; and 1941, 74 per cent.

5. *Liabilities and Assets, 1937 to 1941.*—(i) *General.* The liabilities of the Australian institutions consist mainly of their assurance funds, but in the case of public companies there is a further liability on account of the shareholders' capital. The assets consist chiefly of government and municipal securities, mortgages, loans on policies, landed and house property, etc. Loans on personal security are granted by very few of the Australian institutions.

(ii) *Australian Liabilities and Assets.* For various reasons several institutions do not attempt the dissection of liabilities and assets between the industrial and ordinary branches, and, therefore, the figures in the following tables relate to ordinary and industrial

branches combined. Assets and liabilities of the Liverpool and London and Globe Insurance Company Ltd. are excluded as separate details of the Australian business are not available.

### ORDINARY AND INDUSTRIAL LIFE ASSURANCE : AUSTRALIAN LIABILITIES.

Heading.	1937.	1938.	1939.	1940.	1941.
	£	£	£	£	£
Shareholders' capital, paid-up .. ..	1,600,738	1,568,264	1,568,711	1,568,842	1,498,718
Assurance and annuity funds .. ..	175,475,050	186,397,341	195,500,270	205,716,250	216,973,867
Other funds .. ..	4,745,421	4,972,404	5,697,265	6,324,809	6,845,371
Claims admitted but not paid .. ..	1,891,573	1,816,681	1,917,989	2,077,986	2,871,738
All other liabilities ..	1,497,198	1,499,843	1,271,275	1,472,000	1,239,773
<b>Total Australian Liabilities ..</b>	<b>185,209,980</b>	<b>196,254,533</b>	<b>205,955,510</b>	<b>217,159,887</b>	<b>229,429,467</b>

The item "All other liabilities" has been revised for the years 1937 to 1940 to exclude duplications owing to the investment of amounts from the Industrial Department of a certain company with the funds of its Ordinary Department. The amounts involved are :—1937, £3,086,335 ; 1938, £3,341,590 ; 1939, £3,554,402 ; and 1940, £3,795,507.

Assets for the years specified are set out in detail in the table hereunder :—

### ORDINARY AND INDUSTRIAL LIFE ASSURANCE : AUSTRALIAN ASSETS. (a)

Heading.	1937.	1938.	1939.	1940.	1941.
	£	£	£	£	£
Government and municipal securities ..	109,521,627	113,485,999	115,712,296	123,770,185	135,370,823
Mortgages .. ..	50,401,868	56,724,861	61,719,930	64,451,496	68,344,026
Loans on companies' policies .. ..	21,448,626	21,754,988	22,444,817	22,465,085	22,048,006
Landed and house property .. ..	10,969,919	12,231,645	12,822,673	12,684,517	12,900,600
Life interests and reversions .. ..	223,446	110,443	234,392	230,621	220,416
Other investments ..	(b)4,814,181	(b)4,939,788	(b)6,465,281	(b)7,075,571	5,220,566
Outstanding premiums	957,562	1,043,071	1,086,729	1,073,467	1,037,845
Outstanding interest, dividends and rents	1,686,488	1,776,593	1,811,002	1,868,161	1,944,644
Cash .. ..	2,419,171	2,536,319	2,398,869	2,960,855	2,786,019
Establishment and organization accounts	1,128,658	1,107,688	1,101,409	1,100,388	1,008,288
All other assets ..	1,758,473	1,757,204	1,718,147	1,753,881	1,806,055
<b>Total Australian Assets ..</b>	<b>205,330,019</b> (b)	<b>217,468,599</b> (b)	<b>227,515,545</b> (b)	<b>239,434,227</b> (b)	<b>252,687,288</b>

(a) Excludes Australian assets of Liverpool and London and Globe Coy. (b) Revised to exclude the duplications referred to above.

(iii) *Total Assets.* It has been thought desirable to restrict wherever possible the figures relating to life assurance to business in Australia. Several of the companies whose head offices are in Australia, however, transact a large amount of business elsewhere, namely in New Zealand, in South Africa, and in the United Kingdom, while in the

case of the foreign companies, the Australian business is insignificant compared with that done elsewhere. Particulars of the foreign business of Australian companies appear in *Finance Bulletin* No. 33.

The total assets of all life companies operating in Australia (excluding those of the Liverpool and London and Globe and including the Australasian assets only of the Prudential and the Australian assets only of the Mutual Life of New York) amounted to £321,025,315 in 1941, of which government and municipal securities (£179,164,644), and mortgages (£76,388,260), represented nearly 80 per cent.

6. New Policies issued in Australia, 1941.—(i) *Ordinary Business*. During 1941 127,816 new policies were issued for £44,443,717. The average amount per policy was £348, as compared with an average of £345 per policy for all policies which were in existence at the end of 1940.

(ii) *Industrial Business*. New policies to the number of 403,689 were issued during the year, for a total of £19,927,420. The average per policy was nearly £49, as compared with the average of £45 for all industrial policies current at the end of 1940.

7. Policies Discontinued in Australia.—(i) *Ordinary Business*. The volume of business which from various causes becomes void in each year is always large. The number and amount of policies, including annuities, discontinued in the last three years and the reasons for discontinuance are given in the following table :—

#### ORDINARY LIFE ASSURANCE : POLICIES DISCONTINUED IN AUSTRALIA.

Mode.	1939.		1940.		1941.	
	No. of Policies.	Amount.	No. of Policies.	Amount.	No. of Policies.	Amount.
		£		£		£
Death or maturity ..	22,662	5,626,101	23,269	5,684,032	25,193	6,384,523
Surrender ..	18,593	5,870,056	19,205	6,111,401	17,872	5,758,173
Forfeiture ..	39,433	13,410,488	36,469	12,961,699	30,595	12,116,454
Transfer ..	—131	—102,931	—148	—67,317	—156	—101,099
Total ..	80,467	24,803,714	78,795	24,689,815	73,504	24,158,051

Minus sign (—) denotes excess of transfers to Australian registers over transfers from Australian registers.

The number of policies discontinued because of death or maturity constituted 34 per cent. of the total, because of surrender 24 per cent. and because of forfeiture 42 per cent. Corresponding figures for the amounts insured were 26 per cent., 24 per cent. and 50 per cent. respectively.

(ii) *Industrial Business*. The number of policies discontinued in this Branch each year is also very large. Of the total amount of discontinuances during 1941 35 per cent. was due to death or maturity, 12 per cent. to surrender and 53 per cent. to forfeiture. Corresponding percentages for the amounts insured were 31, 11 and 58 respectively. The large figures for discontinuances by surrender during the last few years are due to the fact that, by the terms of the Industrial Life Assurance Act 1938 (Victoria), holders of policies, in Victoria, of six years duration were accorded the right of a cash surrender value.

In view of this statutory right being granted to policy-holders in Victoria, various offices conducting industrial assurance undertook to extend the principle throughout Australia as from 1st January, 1939. Prior to that date it was the practice to grant cash surrender values to holders of industrial policies in cases of hardship or necessity only.

The number and amount of discontinuances by forfeiture have accordingly decreased.



## INDUSTRIAL LIFE ASSURANCE : POLICIES DISCONTINUED IN AUSTRALIA.

Mode.	1939.		1940.		1941.	
	No. of Policies.	Amount.	No. of Policies.	Amount.	No. of Policies.	Amount.
		£		£		£
Death or maturity ..	73,585	2,758,930	78,130	3,195,289	82,426	3,401,038
Surrender ..	33,766	1,371,696	32,906	1,315,822	27,790	1,174,726
Forfeiture ..	154,328	7,970,340	147,254	7,573,890	123,300	6,402,968
Transfer ..	417	25,131	—65	—1,604	—87	7,713
Total ..	262,096	12,132,097	258,525	12,083,397	233,429	10,986,445

Minus sign (—) denotes excess of transfers to Australian registers over transfers from Australian registers.

8. *Conspectus of Australian Life Assurance Legislation.*—A conspectus of Australian Life Assurance Legislation as then existing appears in Official Year Book No. 18, pp. 1041–59.

## § 3. Fire, Marine and General Insurance.

1. *Australasian Companies\**.—(i) *General.* The following tables show particulars of revenue and expenditure, assets and liabilities, and investments of certain insurance companies having their head offices either in Australia, New Zealand, or Fiji. The business transacted in respect of premium income by these companies during 1940–41 represents approximately 56 per cent. of the aggregate Australian business, some particulars of which are given in par. 2 below.

(ii) *Revenue and Expenditure.* The most important items of revenue and expenditure are given below. The trade surplus in 1940–41 was £1,635,197, or 15.75 per cent. of premium income.

## FIRE, MARINE AND GENERAL INSURANCE COMPANIES : SUMMARY OF REVENUE AND EXPENDITURE.

Heading.	1936–37.	1937–38.	1938–39.	1939–40.	1940–41.
No. of Companies ..	40	40	40	41	36
	£	£	£	£	£
Premiums, less reinsurances ..	7,819,726	8,864,364	9,707,920	10,066,892	10,379,139
Losses ..	4,358,863	5,027,877	5,417,153	5,568,447	5,281,894
Expenses, commission and taxes ..	2,512,992	2,719,823	2,994,069	3,190,208	3,462,048
Trade surplus ..	947,871	1,116,664	1,296,698	1,308,237	1,635,197
Interest, rent, etc. ..	755,302	828,272	1,011,208	889,256	800,630
Total surplus ..	1,703,173	1,944,936	2,307,906	2,197,493	2,441,827
Dividends and bonuses paid ..	680,269	708,576	708,944	727,895	850,829
Ratio to premium income of—	%	%	%	%	%
(a) Losses ..	55.74	56.72	55.80	55.31	50.88
(b) Expenses, etc. ..	32.14	30.68	30.84	31.69	33.36
(c) Trade surplus ..	12.12	13.60	13.36	13.00	15.75

\* The statistical information in this paragraph has been extracted from the *Australasian Insurance and Banking Record*.

(iii) *Liabilities and Assets.* The liabilities and assets for the period 1935–36 to 1939–40 are set out in the following table. Comparison of the results for 1939–40 (41 companies), with those for 1935–36 (40 companies) shows that paid-up capital constituted

20 per cent. of the total liabilities in 1939-40, as compared with 25 per cent. in 1935-36. Reserves constituted 46 per cent. and 45 per cent. 1939-40 and 1935-36 respectively. Government securities and other investments constituted 67 per cent. and 66 per cent. of the total assets for the same years. Figures for later than 1939-40 are not available.

## FIRE, MARINE AND GENERAL INSURANCE COMPANIES.

Heading.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
PAID-UP CAPITAL, RESERVES AND LIABILITIES.					
	£	£	£	£	£
Paid-up capital .. ..	6,566,758	6,674,188	6,676,188	6,823,065	6,859,065
Reserves and reinsurance funds (a) .. ..	11,773,597	12,623,437	14,347,012	14,184,021	15,843,818
Undivided profits .. ..	988,361	954,871	949,172	1,186,969	1,361,451
Losses unsettled .. ..	1,057,319	1,309,361	1,633,225	1,629,354	2,323,514
Sundry creditors, etc. ..	1,632,589	1,833,367	2,141,813	2,093,733	2,516,833
Dividends, etc., to pay ..	423,613	428,751	453,877	418,722	496,706
Life assurance funds (b) ..	3,594,919	3,860,147	4,153,530	4,448,233	4,793,471
Total Liabilities .. ..	26,037,156	27,684,122	30,354,817	30,784,097	34,194,858

## INVESTMENTS AND OTHER ASSETS.

	£	£	£	£	£
Loans on mortgage .. ..	906,802	923,781	1,190,444	953,499	934,330
Government securities, etc. ..	16,865,834	18,186,694	19,666,290	20,287,975	22,914,015
Landed and other property ..	3,066,336	3,158,269	3,434,926	3,683,085	3,803,878
Fixed deposits, etc. .. ..	1,973,553	2,001,642	1,933,967	1,946,707	1,927,038
Loans on life policies (b) ..	307,938	347,400	380,594	423,282	457,105
Investments .. ..	234,226	252,234	176,995	55,078	(c)
Cash and bills receivable ..	966,288	996,553	1,340,647	1,241,924	1,687,421
Sundry debtors and other assets .. ..	1,716,179	1,817,549	2,230,954	2,192,547	2,471,071
Total Assets .. ..	26,037,156	27,684,122	30,354,817	30,784,097	34,194,858

(a) Including amount required as reserves against unexpired risks.  
transact Life Business.

(b) Some of the companies  
(c) Included with Government securities, etc.

2. Aggregate Australian Business.—(i) *States.* While the foregoing statements relate to those companies only whose head offices are located in Australia, New Zealand or Fiji, the following particulars, which are somewhat restricted in the range of information, are in respect of all companies operating in Australia. During 1941-42 revenue from premiums amounted to £19,812,219 and from the net interest on investments, etc., to £839,827, totalling £20,652,046. Expenditure on losses amounted to £8,706,114, contributions to Fire Brigades £442,305, commission and agents' charges £2,014,833, expenses of management £3,627,197, and taxation £1,250,709, a total of £16,041,158.

The following table shows for each State the aggregate premium income, less reinsurances and returns, and claims paid, less reinsurances, together with the proportions of losses on premiums for all classes of insurance other than life for the years 1940-41 and 1941-42.

## FIRE, MARINE AND GENERAL INSURANCE : PREMIUMS AND LOSSES.

State.	Premiums, less reinsurances and returns.		Losses, less reinsurances.		Proportion of Losses on Premiums.	
	1940-41.	1941-42.	1940-41.	1941-42.	1940-41.	1941-42.
	£	£	£	£	%	%
New South Wales ..	7,772,798	8,396,769	4,026,885	3,977,809	51.81	47.37
Victoria ..	5,101,619	5,810,151	2,247,720	2,225,231	44.06	38.20
Queensland ..	2,365,027	2,330,546	1,147,121	1,134,887	48.50	48.70
South Australia ..	1,304,830	1,378,377	542,409	577,232	41.57	41.88
Western Australia ..	1,400,169	1,402,777	618,153	622,303	44.15	44.36
Tasmania ..	489,185	493,599	197,675	168,652	40.41	34.17
All States ..	18,433,628	19,812,219	8,779,963	8,706,114	47.63	43.94

(ii) *Classes of Insurance.* The following statement shows premiums and losses in respect of the principal classes of risks, with the proportions of losses on premiums for the years 1939-40 and 1940-41 :—

FIRE, MARINE AND GENERAL INSURANCE ; PREMIUMS AND LOSSES,  
PRINCIPAL CLASSES OF RISK.

Class of Risk.	Premiums, less reinsurances and returns.		Losses, less reinsurances.		Proportion of Losses on Premiums.	
	1940-41.	1941-42.	1940-41.	1941-42.	1940-41.	1941-42.
	£	£	£	£	%	%
Fire ..	5,945,836	6,221,711	1,861,729	1,588,816	31.31	25.54
Workers' Compensation	4,544,173	4,925,864	3,162,331	3,416,580	69.59	69.36
Motor Vehicle ..	3,497,763	2,922,983	2,209,091	1,748,485	63.16	59.82
Marine ..	2,363,140	3,274,656	821,674	1,122,736	34.77	34.29
Personal Accident ..	591,626	635,000	247,516	253,000	41.84	39.84
All other ..	1,491,090	1,832,005	477,622	576,497	32.03	31.47
Total ..	18,433,628	19,812,219	8,779,963	8,706,114	47.63	43.94

The volume of business measured by the amounts of premium income shows that fire insurances represented about 31 per cent. of the totals during 1940-41 and 1941-42, while next in importance were workers' compensation 25 per cent. during both years, and motor vehicles 19 per cent. in 1940-41 and 15 per cent. in 1941-42. Marine insurance constituted 13 per cent. in 1940-41 and 16.5 per cent. in 1941-42.

During the three years 1932-33 to 1934-35 less than 45 per cent. of the premium income was required on the average to meet losses. Up to 1939-40 the proportion of losses on premiums did not move much from the 50 per cent. mark. For the years 1940-41 and 1941-42, however, the proportion dropped to 47.63 and then to 43.94. Except for Workers' Compensation and Marine the decrease was fairly general. In the case of Marine, the proportion of losses to premiums would have been considerably higher, but for the fact that losses are understated because of claims which may not be finalized for some time.

## E. FRIENDLY SOCIETIES.

1. *General.*—Friendly societies are an important factor in the social life of the community, as probably more than one-third of the total population of Australia comes either directly or indirectly under their influence. Their total membership is over 605,000, but as certain benefits, such as medical attendance and free medicines, and in many cases funeral expenses, are granted to members' families as well as to members themselves, this figure must, even when due allowance is made for young and unmarried



members, be more than doubled to arrive at an estimate of the number of persons who receive some direct benefit from these societies. Legislation has conferred certain privileges on friendly societies, but, on the other hand, it insists on their registration, and it is the duty of the Registrars in the various States, prior to registering a new society, to see that its proposed rules are conformable to the law, and that the scale of contribution is sufficient to provide the promised benefits. Societies are obliged to forward annual returns as to their membership and their finances to the Registrar, and reports are published in most of the States dealing with the returns received. The figures in the following tables are for the year 1940-41 in respect of all States except Tasmania where they relate to the calendar year 1941, and New South Wales, where they relate to the year 1938-39, particulars for later years not having been tabulated, because of staff shortages due to the war.

2. Number of Societies, Lodges and Members.—The number of different societies and lodges, the total number of benefit members at the end of the year, and their average number during the year are shown in the following table :—

FRIENDLY SOCIETIES : SOCIETIES, LODGES AND MEMBERS.(a)

State.		Number of Registered Friendly Societies.	Number of Branches.	Benefit Members at End of Year.	Average No. of Benefit Members during the Year.
New South Wales (b)	..	33	2,402	211,170	211,653
Victoria (c)	..	83	1,471	195,902	193,883
Queensland	..	23	589	72,615	72,565
South Australia (d)	..	17	(e) 883	76,357	75,919
Western Australia (d)	..	13	339	27,046	27,158
Tasmania ..	..	19	180	24,722	(f) 24,661
Total	..	188	5,864	607,812	605,839

(a) See par. 1 for years covered. (b) Excludes twenty-one miscellaneous societies consisting of Medical Institutes, Dispensaries, and Burial Societies. (c) Excludes Dispensaries and Juvenile branches. (d) Excludes Juvenile Branches. (e) Societies containing male and female branches counted as two branches. (f) Estimated.

3. Sickness and Death Returns.—Sick pay is generally granted for a number of months at full rates, then for a period at half rates, and in some societies is finally reduced to quarter rates. The following table shows the total number of members who received sick pay during the year, the number of weeks for which they received pay in the aggregate, and the average per member sick, and further the number of benefit members who died during the year, together with the proportion of deaths per thousand average members :—

FRIENDLY SOCIETIES : SICKNESS AND DEATH RETURNS.(a)

State.		Number of Members who received Sick Pay.	Total Number of Weeks Sick Pay Granted.	Average Number of Weeks per Member Sick.	Benefit Members.	
					Deaths.	Proportion of deaths per 1,000 (Average).
New South Wales	..	52,340	522,174	9.98	2,708	12.80
Victoria ..	..	53,320	519,086	9.74	2,203	11.36
Queensland	..	(b) 14,438	(b) 145,385	10.07	837	11.53
South Australia	..	19,942	214,683	10.77	967	12.74
Western Australia	..	7,073	61,838	8.74	252	9.28
Tasmania	..	4,471	48,142	10.77	332	13.46
Total	..	151,584	1,511,308	9.97	7,299	12.05

(a) See par. 1 for years covered.

(b) Females counted as half members in these totals.

4. *Revenue and Expenditure.*—(i) *Revenue.* The financial returns are not prepared in the same way in each State, but an attempt has been made in the following table to group the revenue under the main headings:—

## FRIENDLY SOCIETIES : REVENUE.(a)

State.	Entrance Fees, Members' Contributions and Levies.	Interest, Dividends and Rents.	All other Revenue.	Total Revenue.
	£	£	£	£
New South Wales .. ..	767,621	208,651	29,709	1,006,041
Victoria .. ..	731,432	277,955	72,617	1,082,004
Queensland .. ..	254,309	94,380	(b)	348,689
South Australia .. ..	201,202	145,802	22,010	429,014
Western Australia .. ..	110,389	29,627	5,395	145,411
Tasmania .. ..	87,298	23,559	12,054	122,911
Total .. ..	2,212,251	779,974	141,845	3,134,070

(a) See par. 1 for years covered.

(b) Included in interest, dividends and rents.

(ii) *Expenditure.* The returns relating to expenditure are in greater detail than those for revenue. The figures show that the excess of revenue for the year was £475,209 for Australia, representing about 15s. 8d. per average benefit member.

## FRIENDLY SOCIETIES : EXPENDITURE.(a)

State.	Sick Pay.	Medical Attendance and Medicine.	Sums Payable at Death of Members and Members' Wives.	Adminis- tration.	All other Expendi- ture.	Total Expendi- ture.
	£	£	£	£	£	£
New South Wales .. ..	278,738	306,029	89,368	164,570	27,931	866,636
Victoria .. ..	301,123	309,728	54,459	148,623	101,040	914,973
Queensland .. ..	86,346	105,944	41,894	55,580	(b)	289,764
South Australia .. ..	105,962	104,630	44,204	47,857	42,142	344,795
Western Australia .. ..	35,291	43,188	13,162	24,982	11,520	128,143
Tasmania .. ..	25,780	32,735	23,160	21,203	11,672	114,550
Total .. ..	833,240	902,254	266,247	462,815	194,305	2,658,861

(a) See par. 1 for years covered.

(b) Included in administration.

It appears from the above figures that sick pay averaged about 27s. 6d. per average benefit member, but, as the returns include pay at half and quarter rates, and as the proportion of these to full rates is not stated, the average given is somewhat indefinite. Medical attendance and medicine cost about 29s. 9d. per average benefit member.

5. *Funds.*—The two foregoing tables show that the surplus of revenue over expenditure in all States amounted to £475,209 for the year. Accumulations of profits arising in the sickness and funeral funds of these societies are invested pending claims by members, and at the end of the year 1941 the total funds of friendly societies amounted to £17,991,841 (£29 12s. per benefit member), invested principally on mortgage loans on members' homes, real estate, and in Government and Municipal securities.

F. PROBATES.

1. Probates and Letters of Administration.—The following particulars give some idea of the number and value of estates of deceased persons in respect of the year 1940. Later particulars are not available because of the cessation in compilation of these statistics for the duration of the war. Owing to differences in legislation in the various States, however, the figures are not entirely comparable. The details for each State are shown in the table hereunder :—

PROBATES AND LETTERS OF ADMINISTRATION, 1940.

Particulars.		New South Wales, 1939-40. (a)	Victoria, 1940.	Queensland, 1939-40.	South Australia, 1940.	Western Australia, 1940.	Tasmania, 1940.	Total.
Probates—								
Estates	No.	10,828	6,617	1,272	1,816	1,251	b 547	22,331
Gross Value	£	(c)	23,876,091	6,215,825	5,600,166	3,279,327	b 1,760,197	(d)
Net Value	£	26,598,763	21,186,983	(c)	4,669,225	2,539,260	b 1,556,356	(d)
Letters of Administration—								
Estates	No.	(c)	1,764	231	200	329	b 143	(d)
Gross Value	£	(c)	(e)	478,029	268,498	358,022	b 219,095	(d)
Net Value	£	(c)	(e)	(c)	176,604	237,742	b 177,617	(d)
Total—								
Estates	No.	10,828	8,381	1,503	2,016	1,580	690	24,998
Gross Value	£	(c)	23,876,091	6,693,854	5,868,664	3,637,349	1,979,292	(d)
Net Value	£	26,598,763	21,186,983	(c)	4,845,829	2,777,002	1,733,973	(d)

(a) Total estates of deceased persons assessed for Death Duty. (b) Applications dealt with.  
(c) Not available. (d) Incomplete. (e) Included with Probates.

2. Intestate Estates.—The number of intestate estates administered by the Curator during the year, and the amount of unclaimed money paid into Consolidated Revenue in each State during the year 1940 are given hereunder :—

INTESTATE ESTATES, 1940.(a)

Particulars.		N.S.W.	Vic.	Q'land. (b)	S. Aust.	W. Aust.	Tas.	Total.
Intestate estates administered by Curator during 1940—								
Number	..	(c)	195	671	(d) 185	454	(e) 79	(f)
Gross Value	£	(c)	103,346	209,984	(d) 108,404	29,108	(e) 10,645	(f)
Net Value	£	(c)	88,950	167,603	(d) 77,488	(c)	(c)	(f)
Unclaimed money paid into Consolidated Revenue by Curator during 1940	£	(c)	9,912	(g) 9,732	5,266	4,209	(c)	(f)

(a) Not included above in the table of Probates and Letters of Administration granted. (b) Year ended 30th June, 1940. (c) Not available. (d) Excludes estates of persons leaving wills: number, 213; gross value, £155,659; net value, £118,654. (e) Excludes estates of persons leaving wills: number, 57; gross value, £10,645. (f) Incomplete. (g) Paid to Unclaimed Moneys Fund.



## CHAPTER XVII.

### PUBLIC FINANCE.

#### A.—GENERAL.

In early issues of the Official Year Book the plan was adopted of including a single Chapter under the general heading of "Finance". A departure was made in Official Year Book No. 25 by dividing the subject into separate Chapters with the two broad headings of "Public Finance" and "Private Finance".

The subject of "Public Finance" is dealt with in this Chapter under the two major divisions of Commonwealth Finance and State Finance. The close financial relations between the Commonwealth and States particularly since the Financial Agreement has been in operation, however, demand a combination of these two divisions under the heading of Commonwealth and State Finance.

#### B.—COMMONWEALTH FINANCE.

##### § 1. General.

1. *Financial Provisions of the Constitution.*—The main provisions of the Constitution relating to the initiation and development of the financial system of the Commonwealth are contained in Chapter IV. "Finance and Trade" being Sections 81 to 105 of the Commonwealth Constitution. Two other sections which have a most important bearing on questions of Commonwealth finance are Sections 69 and 51.

Section 69 provides for the transfer to the Commonwealth from the States of certain specified departments, and Section 51, in outlining the powers of the Commonwealth Parliament, implies the transfer or creation of various other departments. Section 87 deals with the financial relations between the Commonwealth and the States. These matters have been treated in previous issues of the Official Year Book and on p. 563 of this issue a *résumé* is given of the constitutional obligations upon the Commonwealth regarding payments to the States.

The majority of the tables relating to Commonwealth Finance have been compiled from the annual Budget Papers as presented to Parliament by the Treasurer of the Commonwealth.

2. *Accounts of Commonwealth Government.*—(i) *General.* The Commonwealth Government, like the State Governments, bases its accounts mainly upon three funds, the Consolidated Revenue Fund, the Trust Fund and the Loan Fund, the last-mentioned fund coming into existence in the financial year 1911-12.

(ii) *Receipts, Expenditure, etc.* The following statement shows for the period 1925-26 to 1941-42 the receipts, expenditure and excess receipts or deficiency for the year, together with the accumulated result and the payments made from the excess receipts.

The receipts and expenditure on account of the Balance of Interest on States' Debts payable by the States to the Commonwealth under the Financial Agreement have been excluded.

## COMMONWEALTH CONSOLIDATED REVENUE : RECEIPTS, EXPENDITURE, ETC.

Year.	Receipts.	Expenditure.	Ordinary Transactions.		Payments from Excess Receipts.	Accumulated Result.	
			Excess Receipts.	Deficiency.		Excess Receipts.	Deficiency. (a)
	£	£	£	£	£	£	£
1925-26 ..	70,203,572	70,577,204	..	373,632	62,450,000	285,897	..
1926-27 ..	75,544,382	72,908,785	2,635,597	..	(c) 100,000	2,821,494	..
1927-28 ..	73,808,227	76,438,464	..	2,630,237	62,820,000	..	2,628,743
1928-29 ..	74,894,799	77,253,774	..	2,358,975	..	..	4,987,718
1929-30 ..	77,143,389	78,614,392	..	1,471,003	..	..	6,458,721
1930-31 ..	69,566,920	80,324,539	..	10,757,619	..	..	17,216,340
1931-32 ..	71,532,298	70,218,207	1,314,091	..	..	1,314,091	..
1932-33 ..	73,512,809	69,966,201	3,546,608	..	..	4,860,699	..
1933-34 ..	73,941,953	72,640,383	1,301,570	..	..	6,162,269	..
1934-35 ..	77,369,105	76,657,900	711,205	..	76,160,000	713,474	..
1935-36 ..	82,203,341	78,635,621	3,567,720	..	(g) 713,474	3,567,720	17,002,866
1936-37 ..	82,807,977	81,531,419	1,276,558	..	63,567,720	1,276,558	15,935,146
1937-38 ..	89,458,154	85,963,421	3,494,733	..	61,276,558	3,494,733	15,658,588
1938-39 ..	95,064,790	94,437,481	627,309	..	63,494,733	627,309	15,658,588
1939-40 ..	111,913,784	108,985,409	2,928,375	..	(h) 627,309	2,928,375	15,658,588
1940-41 ..	150,482,306	150,482,306	..	..	62,928,375	..	15,658,588
1941-42 ..	210,040,969	210,040,969	..	..	..	..	15,658,588

(a) Met by temporary advance from loan fund. (b) Naval construction, £1,500,000; Main Roads, £750,000; Science and Industry investigations, £100,000; and prospecting for oil and precious metals, £100,000. (c) Prospecting for oil and precious metals. (d) Naval construction and Defence reserve, £2,250,000; Science and Industry investigation, £250,000; Civil Aviation, £200,000; Purchase of radium, £100,000; and Geophysical Survey of Australia, £20,000. (e) Excludes Interest, etc., paid on behalf of New South Wales and not recovered at 30th June, 1931. (f) Defence equipment, £4,160,000 and Financial Assistance to States, £2,000,000. (g) Grants to States, £500,000 and Reduction of Deficit, £213,474. (h) See table following.

(iii) *Excess Receipts.* Particulars of the excess receipts, accumulated balances and allocation of excess receipts for each of the past five years are as follows:—

## COMMONWEALTH CONSOLIDATED REVENUE : EXCESS RECEIPTS.

Particulars.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Accumulated balance .. ..	1,276,558	3,494,733	627,309	2,928,375	..
Excess receipts .. ..	3,494,733	627,309	2,928,375	..	..
Total for year .. ..	4,771,291	4,122,042	3,555,684	2,928,375	..
Expenditure from excess receipts—					
Grants to States .. ..	..	..	..	..	..
Defence equipment .. ..	..	3,494,733	627,309	2,928,375	..
Post Office works provision .. ..	1,000,000	..	..	..	..
Reduction of deficit .. ..	276,558	..	..	..	..
Total .. ..	1,276,558	3,494,733	627,309	2,928,375	..
Accumulated balance .. ..	3,494,733	627,309	2,928,375	..	..

The transactions of the Consolidated Revenue Fund during 1940-41 and 1941-42 resulted in balanced budgets, the whole of the revenue available after charging ordinary services having been applied for war purposes.

## § 2. Consolidated Revenue Fund.

## Division I.—Nature of Fund.

The provisions made for the formation of a Commonwealth Consolidated Revenue Fund, and the means to be adopted for operating on the fund, are contained in Sections 81 to 83 of the Constitution.

## Division II.—Revenue.

1. **General.**—The following table furnishes details of the revenue from each source and the amount per head of population under each of the main headings during the years 1937-38 to 1941-42 :—

## COMMONWEALTH CONSOLIDATED REVENUE : SOURCES.

Source.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Taxation .. .. .	69,048,485	74,036,899	90,010,663	125,383,522	179,435,345
Percentage of Total .. %	77.2	77.9	80.4	83.3	85.5
Per head of population (a) ..	£10 1 2	£10 13 10	£12 17 4	£17 14 9	£25 2 10
Business Undertakings .. .. .	17,188,881	17,892,221	18,485,141	19,975,434	23,386,460
Percentage of Total .. %	19.2	18.8	16.5	13.3	11.1
Per head of population (a) ..	£2 10 1	£2 11 8	£2 12 10	£2 16 6	£3 5 6
Territories (b) .. .. .	330,975	355,401	415,412	506,864	491,969
Percentage of Total .. %	0.4	0.4	0.4	0.3	0.2
Per head of population (a) ..	£0 1 0	£0 1 0	£0 1 2	£0 1 5	£0 1 5
Other Revenue—					
Interest, etc. (c) .. .. .	1,044,076	1,144,014	1,150,102	1,186,194	997,516
Coinage .. .. .	362,705	127,764	180,458	752,471	867,889
Defence .. .. .	29,244	151,208	166,880	303,640	834,800
Civil Aviation .. .. .	5,556	5,745	11,171	137,951	185,355
Health .. .. .	17,621	18,204	15,740	14,338	113,922
Patents, Trade Marks, etc. ..	61,435	67,914	61,982	57,150	55,037
Bankruptcy .. .. .	36,441	30,770	35,817	32,318	24,877
Commerce and Marine—					
Wool Levy .. .. .	77,523	74,396	84,361	84,279	85,934
Other .. .. .	182,463	158,137	147,315	136,706	169,578
Net Profit on Australian Note Issue	839,883	766,730	985,993	1,461,839	1,658,141
Balance of Trust Accounts ..	10,940	..	..	31,476	1,600,459
Other .. .. .	221,926	235,387	162,749	418,124	133,687
Total .. .. .	2,889,813	2,780,269	3,002,568	4,616,486	6,727,195
Percentage of Total .. %	3.2	2.9	2.7	3.1	3.2
Per head of population (a) ..	£0 8 5	£0 8 0	£0 8 7	£0 13 2	£0 18 10
Grand Total .. .. .	89,458,154	95,064,790	111,913,784	150,482,306	210,040,969
Per head of population (a) ..	£13 0 8	£13 14 6	£15 19 11	£21 5 10	£29 8 7
Balance of Interest on States' Debts—recoverable from States .. .. .	25,580,374	25,584,456	26,299,098	26,416,544	25,939,364

(a) Based on mean population of each financial year.  
balance of Interest on States' Debts payable by States.

(b) Excludes Railways.

(c) Excludes

2. **Taxation.**—(i) *Total Collections.* (a) *Amount.* Collections under each heading for the years 1937-38 to 1941-42 are given below :—

## COMMONWEALTH TAXATION : TOTAL COLLECTIONS.

Heading.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Customs .. .. .	32,972,666	31,160,462	34,830,306	29,409,666	25,208,806
Excise .. .. .	15,410,339	16,471,903	18,994,600	24,370,117	31,572,002
Sales Tax .. .. .	8,023,886	9,308,334	12,196,175	19,792,680	26,830,085
Flour Tax .. .. .	3,025	1,808,972	2,486,070	1,498,595	1,651,717
Land Tax .. .. .	1,368,444	1,489,436	1,645,829	3,190,822	3,691,184
Income Tax(a) .. .. .	9,398,503	11,882,440	16,430,313	43,305,239	77,563,926
Pay-roll Tax .. .. .	..	..	..	..	8,962,464
Gold Tax .. .. .	..	..	1,214,621	1,452,260	1,030,425
Estate Duty .. .. .	1,872,654	1,915,352	2,212,690	2,364,133	2,845,005
Gift Duty .. .. .	..	..	..	..	79,731
Other .. .. .	Dr. 1,032	..	59	10	..
Total Taxation .. .. .	69,048,485	74,036,899	90,010,663	125,383,522	179,435,345
Percentage on Total Revenue ..	77.2	77.9	80.4	83.3	85.5

(a) Includes War-time (Company) and Super Taxes.



(b) *Percentages of Total Collections.* The following table shows the percentages of the collections under each class of taxation on the total collections for the last five years :—

## COMMONWEALTH TAXATION : PERCENTAGES ON TOTAL COLLECTIONS.

Heading.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	%	%	%	%	%
Customs .. .. .	47.8	42.1	38.7	23.5	14.1
Excise .. .. .	22.3	22.3	21.1	19.4	17.6
Sales Tax .. .. .	11.6	12.6	13.5	15.8	14.9
Flour Tax .. .. .	..	2.4	2.8	1.2	0.9
Land Tax .. .. .	2.0	2.0	1.8	2.5	2.1
Income Tax(a) .. .. .	13.6	16.0	18.3	34.5	43.2
Pay-roll Tax .. .. .	..	..	..	..	5.0
Gold Tax .. .. .	..	..	1.3	1.2	0.6
Estate Duty .. .. .	2.7	2.6	2.5	1.9	1.6
Gift Duty .. .. .	..	..	..	..	..
Other .. .. .	..	..	..	..	..
Total .. .. .	100.0	100.0	100.0	100.0	100.0

(a) Includes War-time (Company) and Super Taxes.

(ii) *Customs Revenue.* (a) *Classified.* Particulars for the five years 1937-38 to 1941-42 are shown in the following table :—

## COMMONWEALTH CUSTOMS REVENUE : CLASSIFICATION.

Classes.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Ales, spirits and beverages .. .. .	1,174,494	1,165,503	1,449,899	963,841	885,404
Tobacco and manufactures thereof .. .. .	3,243,490	3,256,496	3,379,971	4,030,766	4,864,164
Sugar .. .. .	5,380	7,238	5,812	6,606	18,790
Agricultural products and groceries .. .. .	1,268,440	1,365,938	1,465,400	1,149,380	848,417
Textiles and attire .. .. .	3,169,485	2,801,103	3,217,479	2,050,028	2,166,798
Metals and machinery .. .. .	2,762,044	2,385,882	2,161,144	1,256,736	1,479,055
Oils, paints, etc. .. .. .	9,631,390	9,927,346	12,305,774	11,968,756	7,392,294
Earthenware, etc. .. .. .	534,912	509,980	448,585	274,553	253,593
Drugs and chemicals .. .. .	312,532	309,984	370,991	244,158	224,432
Wood, wicker and cane .. .. .	779,677	739,057	649,237	323,732	190,165
Jewellery and fancy goods .. .. .	522,365	480,916	586,270	441,463	399,316
Leather and rubber .. .. .	497,950	477,163	504,682	362,804	382,187
Paper and stationery .. .. .	488,716	453,548	435,677	182,870	116,254
Vehicles .. .. .	2,696,560	2,061,762	1,555,746	439,729	605,865
Musical instruments .. .. .	27,956	31,589	19,608	7,289	3,743
Miscellaneous articles .. .. .	1,173,635	1,023,556	1,140,649	734,340	795,471
Primage .. .. .	4,450,901	3,913,578	4,623,131	3,428,344	3,154,144
Special War Duty .. .. .	..	..	395,227	1,384,170	1,226,041
Other receipts .. .. .	232,739	249,823	205,024	160,101	202,673
Total Customs Revenue .. .. .	32,972,666	31,160,462	34,830,306	29,409,666	25,208,806

(b) *States.* The following table shows the Customs Duties collected in each State during the last five years :—

**COMMONWEALTH CUSTOMS DUTIES : COLLECTIONS IN EACH STATE.**

State.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
New South Wales (a)	14,831,986	14,070,130	15,228,153	12,637,757	11,351,335
Victoria ..	10,626,241	9,970,730	11,437,572	9,947,177	8,519,145
Queensland..	2,955,788	2,977,792	3,419,454	2,842,785	2,376,466
South Australia (b)	2,332,090	2,090,020	2,447,372	2,049,622	1,480,456
Western Australia ..	1,814,435	1,653,906	1,843,192	1,471,149	1,130,366
Tasmania ..	412,126	397,884	454,563	461,176	351,038
Total ..	32,972,666	31,160,462	34,830,306	29,409,666	25,208,806

(a) Includes Australian Capital Territory.

(b) Includes Northern Territory.

(iii) *Excise Revenue.* (a) *Classified.* Particulars concerning the amount of Excise collected under each head during each of the five years ended 30th June, 1942, are given hereunder :—

**COMMONWEALTH EXCISE REVENUE : CLASSIFICATION.**

Particulars.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Beer ..	6,893,739	7,288,579	8,780,470	11,228,913	14,302,773
Spirits (a) ..	1,579,486	1,604,220	1,899,931	2,368,572	2,885,834
Tobacco ..	3,414,513	3,867,983	4,059,020	4,811,701	6,589,683
Cigars and cigarettes	2,177,784	2,418,723	2,507,292	2,993,641	4,638,931
Cigarette papers ..	468,659	530,868	545,057	689,128	805,323
Petrol ..	681,870	581,978	989,869	1,802,516	1,275,052
Matches ..	81,510	81,960	91,903	244,361	525,028
Playing cards ..	10,906	11,432	14,252	13,240	11,315
Miscellaneous ..	101,872	86,160	106,806	218,045	538,063
Total Excise Revenue ..	15,410,339	16,471,903	18,994,600	24,370,117	31,572,002

(a) Includes concentrated grape must.

(b) *States.* Excise collections in each State for the last five years were as follows :—

**COMMONWEALTH EXCISE REVENUE : COLLECTIONS IN EACH STATE.**

State.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
New South Wales ..	7,373,723	6,940,301	8,479,925	11,022,450	14,484,548
Victoria ..	4,871,017	5,687,832	6,533,146	8,073,057	10,401,369
Queensland..	1,304,390	1,538,042	1,548,510	1,974,064	2,412,356
South Australia (b)	717,676	1,018,148	1,029,912	1,494,473	2,117,125
Western Australia ..	972,131	1,103,481	1,186,165	1,532,825	1,837,957
Tasmania ..	171,402	184,099	216,942	273,248	318,647
Total ..	15,410,339	16,471,903	18,994,600	24,370,117	31,572,002

(a) Includes Australian Capital Territory, Dr. £148,765.

(b) Includes Northern Territory.

(iv) *Other Taxation.* (a) *Collections paid to Revenue.* The following statement shows particulars of the collections on account of taxes other than Customs and Excise during the last ten years. War-time (1939-42) Company and Super Tax, introduced during 1940-41, is included under the heading Income Tax. Owing to certain accounting technicalities the figures herein differ slightly from those on the following pages showing further particulars of the several taxes.

## OTHER TAXATION COLLECTIONS : AUSTRALIA.

Year ended 30th June—	Land Tax.	Estate Duty.	Income Tax.	Pay-roll Tax.	Gold Tax.	Entertainments Tax.	Sales Tax.	Flour Tax.
	£	£	£	£	£	£	£	£
1933 ..	1,650,311	1,126,996	10,878,718	..	..	134,042	9,369,276	..
1934 ..	1,325,393	1,511,296	9,314,768	..	..	51,216	9,695,689	1,253,957
1935 ..	1,281,424	1,507,827	8,761,619	..	..	Dr. 599	8,554,076	798,354
1936 ..	1,326,991	1,472,860	8,775,562	..	..	13	9,432,483	1,150,724
1937 ..	1,435,465	1,792,600	8,556,014	..	..	107	8,008,427	Dr. 12,193
1938 ..	1,368,444	1,872,654	9,398,503	..	..	1	8,023,886	3,025
1939 ..	1,489,436	1,915,352	11,882,440	..	..	..	9,308,334	1,808,972
1940 ..	1,645,829	2,212,690	16,430,313	..	1,214,621	59	12,196,175	2,486,070
1941 ..	3,190,822	2,364,133	43,305,239	..	1,452,260	10	19,792,680	1,498,595
1942 ..	3,691,184	2,845,005	77,563,926	8,962,464	1,030,425	(a) 79,731	26,830,085	1,651,717

(a) Gift Duty.

"Other Taxation" is assessed and collected in general by the Commissioner of Taxation. The organization comprises an office in each State assessing taxpayers who are concerned with that State only, and a Central Office assessing taxpayers whose interests are in more than one State. Taxes, however, may be paid to any office, so that the sums actually received by any office do not correspond to the assessments made by that office and frequently differ by very large amounts. Consequently the actual receipts by any State office, e.g., of income tax by the Queensland office, may include tax in respect of Central Office or New South Wales assessments, and, therefore, may not be a proper measure of income tax paid on account of income derived from Queensland.

The actual receipts by the various offices are the figures of necessity used by the Treasury for accounting purposes, and may be called the "Treasury" figures. In order to give a more significant picture of the taxation in States, figures furnished by the Commissioner of Taxation, which refer strictly to the assessments made on account of the State specified, are used in the following tables. The totals of these figures do not quite agree with the total Treasury figures owing to certain technicalities of accounting, but the differences are small. The Taxation Office figures give a fair comparison between States, e.g., in taxation paid per head, but do not give the absolute measure of taxation, because the Central Office collections, which include taxation on account of all States, have not been allocated to the States. In the absence of precise information, it may be assumed as a rough approximation that Central Office collections may be divided among States in proportion to State office collections. It is probable, however, that a somewhat larger share is derived from the more populous States, New South Wales and Victoria.



(b) *Land Tax.* Commonwealth Land Tax was first imposed on the unimproved value of land in 1910-11. The following table shows the rates of Land Tax imposed for each assessment year from 1933-34 to 1942-43 :—

LAND TAX : RATE OF TAX PER £1 OF TAXABLE VALUE.

(T = Taxable Value.)

Assessment Year.	Residents.				Absentees.(a)			
	Taxable Value £1 to £75,000.	Taxable Value over £75,000.		Taxable Value £1 to £80,000.	Taxable Value over £80,000.		Taxable Value over £80,000.	
		First £75,000.	Excess over £75,000.		First £5,000.	Excess over £5,000.	First £5,000.	Next £75,000.
1933-34 to 1937-38	$\frac{45}{100} \left( 1 + \frac{T}{18,750} \right)$	d.	d.	d.	$\frac{45}{100} \left( 2 + \frac{T-5,000}{18,750} \right)$	d.	d.	d.
1938-39 to 1939-40	$\left( \frac{1}{2} + \frac{T}{37,500} \right)$	2.25	4.05	.45	$\left( 1 + \frac{T-5,000}{37,500} \right)$	.45	2.7	4.5
1940-41 to 1942-43b	$\left( 1 + \frac{T}{18,750} \right)$	2.5	4.5	.5	$\left( 2 + \frac{T-5,000}{18,750} \right)$	.5	3	5
		5	9	1		1	6	10

(a) Absentees are not allowed an exemption of £5,000 granted to residents. (b) In addition, if the taxable value exceeds £20,000, there is payable for 1941-42 and 1942-43 a super tax equal to the lesser amount of the following :— (i) twenty per cent. of the amount of land tax ; or (ii) one per cent. of the amount by which the taxable value of the land exceeds £20,000.

Under the National Security (Values for Land Tax) Regulations the revaluations of land for the purposes of the Land Tax Assessment Act 1910-1940 are postponed until after the war. Thereby the values of land, or of interests in land, as assessed for the financial year 1939-40, were adopted for the financial year 1940-41 and subsequent years for the duration of the war. An amendment to the regulations permitted the application of lower values in cases of assessments at a lower value prior to 13th March, 1942, or after that date, in consequence of objections or protests lodged previously. In addition, where a taxpayer had furnished a full and complete return of land owned at 30th June in any year prior to 1942, the lodgment of further returns was dispensed with. There is an exception in respect of changes in land owned.

Land Tax receipts in each State and Central Office for the years 1937-38 to 1941-42 were as follows. The particulars shown differ slightly from those quoted in (a) above.

LAND TAX RECEIPTS.

State, etc.		1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
		£	£	£	£	£
Central Office ..	..	438,813	525,959	578,769	1,186,885	1,410,677
New South Wales ..	..	505,143	509,913	568,840	1,042,271	1,209,724
Victoria ..	..	277,512	290,798	333,194	653,279	706,170
Queensland ..	..	26,887	29,568	30,086	58,557	64,581
South Australia ..	..	48,295	55,280	64,865	120,681	129,719
Western Australia ..	..	59,074	63,854	53,351	98,949	122,523
Tasmania ..	..	12,237	12,879	16,388	31,216	34,623
Total ..	..	1,367,961	1,488,251	1,645,493	3,191,838	3,678,017

(c) *Estate Duty.* The Commonwealth Estate Duty Act 1914 and Estate Duty Assessment Acts 1914-1928 imposed a duty on the estates of deceased persons the net value of which exceeded £1,000. The rate of tax, where the value of the estate for duty did not exceed £2,000, was £1 per cent. Where the value of the estate for duty exceeded £2,000 the rate was increased by one-fifth of £1 for each £1,000 or part thereof in excess of £2,000, to a maximum rate of £15 per cent. on estates over £71,000. Where the estate passed to a widow, children or grand-children, duty was payable at two-thirds of the ordinary rate.

Under the Estate Duty Assessment Act (No. 12 of 1940) the Estate Duty Assessment Act 1914-1928 was amended to allow the following Statutory Exemption, namely:—

(a) Where the whole of the estate passes to the widow, children or grand-children of the deceased, the sum of £2,000 decreasing by £1 for every £10 by which the value exceeds £2,000 up to £10,000, and thereafter decreasing by £1 for every £2 by which the value exceeds £10,000; (b) When no part of the estate passes to the widow, children or grand-children the sum of £1,000 decreasing by £1 for every £10 by which the value exceeds £1,000 up to £6,000, and thereafter decreasing by £1 for every £8 by which the value exceeds £6,000; and (c) Where part only of the estate passes to the widow, children or grand-children the Statutory Exemption is to be calculated proportionately under (a) and (b).

Under the Estate Duty Act (No. 13 of 1940) the following new rates were imposed: £1 to £10,000, 3 per cent.; £10,001 to £20,000, 3 per cent. to 6 per cent.; £20,001 to £100,000, 6 per cent. to 18 per cent.; £100,001 to £500,000, 18 per cent. to 20 per cent.; over £500,000, 20 per cent. By the Estate Duty Act (No. 51 of 1941) these rates were amended to the following:—£1 to £10,000, 3 per cent.; £10,001 to £20,000, 3 per cent. to 6 per cent.; £20,001 to £120,000, 6 per cent. to 26 per cent.; £120,001 to £500,000, 26 per cent. to 27.9 per cent.; over £500,000 27.9 per cent.

Under the Estate Duty Assessment Act 1914-1940 provision was made for the exemption of the estates of members of the Forces who die on active service or within one year after its termination from injuries received or disease contracted on active service, provided the value of the estate did not exceed £5,000. In June, 1942, an amendment provided for a flat exemption of £5,000 in respect of the estates of those members of the Forces who die during the war or within three years of its termination. The exemption was restricted to estates passing to the widow, children, grand-children, parents, brothers, sisters, nephews or nieces of the deceased.

Particulars of the collections in each State and Central Office for the last five years are shown in the following table. Owing to certain accounting technicalities, these figures differ slightly from the Treasury returns given on page 542.

## ESTATE DUTY RECEIPTS.

State, etc.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Central Office .. ..	902,266	999,202	1,165,049	1,280,052	1,497,501
New South Wales .. ..	396,003	422,567	391,978	444,579	527,928
Victoria .. ..	397,386	294,406	413,269	420,369	489,157
Queensland .. ..	85,335	60,041	82,153	96,000	98,101
South Australia .. ..	44,295	82,789	82,456	84,879	109,419
Western Australia .. ..	31,809	34,074	51,806	30,256	45,182
Tasmania .. ..	12,506	15,960	21,528	16,184	49,855
Northern Territory .. ..	119	..	..	..	..
<b>Total .. ..</b>	<b>1,869,719</b>	<b>1,909,039</b>	<b>2,208,239</b>	<b>2,372,319</b>	<b>2,817,143</b>

Particulars relating to the number and value of estates with duty assessed for each of the last five assessment years are given in the following table :—

### ESTATE DUTY ASSESSMENTS.

Particulars.		1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of Estates	No.	9,085	9,681	10,303	8,189	7,705
Gross Value Assessed	£'000	60,964	65,699	75,482	63,024	66,591
Deductions ..	£'000	11,624	12,630	15,734	11,916	13,887
Statutory Exemption	£'000	..	..	..	5,827	8,945
Dutiable Value ..	£'000	49,340	53,069	59,748	45,281	43,759
Duty Payable ..	£	1,852,956	2,002,283	2,359,428	2,227,333	3,117,020
Average dutiable value	£	5,431	5,482	5,799	5,529	5,679
Average duty per estate	£	204	207	229	272	405

(d) *Income Tax.* Details of Commonwealth and State taxes on income are given in Chapter XXVII. "Miscellaneous".

(e) *Sales Tax.* The Sales Tax was imposed in August, 1930. The operation of the tax is controlled chiefly by a system of registration of taxpayers, and all manufacturers and wholesale merchants, who are the taxpayers under the Act in respect of goods sold in Australia, must be registered with the Department. The tax on imports subject to sales tax is collected by the Customs Department at ports of entry.

Since the inception of the tax certain exemptions have been allowed. These exemptions, which have been extended from time to time, relate mainly to goods of an essential nature or for use in primary production. Certain of these exemptions were withdrawn as from 22nd November, 1940.

The following are the rates of sales tax imposed since its inception in August, 1930 : 2½ per cent. to 10th July, 1931 ; 6 per cent. to 25th October, 1933 ; 5 per cent. to 10th September, 1936 ; 4 per cent. to 21st September, 1938 ; 5 per cent. to 8th September, 1939 ; 6 per cent. to 2nd May, 1940 ; 8½ per cent. to 21st November, 1940 ; 5 per cent., 10 per cent. and 15 per cent. to 29th October, 1941., 5 per cent., 10 per cent. and 20 per cent. to 30th April, 1942, and 12½ per cent. and 25 per cent. from 1st May, 1942.

The differential rates applicable as from 22nd November, 1940, related to different classes of goods specified in Schedules in the Sales Tax (Exemptions and Classifications) Act 1935-1943. The rate of 5 per cent. applied to goods, formerly exempt, which were brought back into the taxable field. The rate of 20 per cent. was applied to goods which may be described as being of a non-essential nature. Of the May, 1942 rates, the 12½ per cent. is the general rate, and includes some of those goods previously rated at 5 per cent. The remainder of the 5 per cent. class was again classified as exempt. From 21st July, 1943, the rate on rationed clothing was reduced to 7½ per cent.

Particulars of the net amount of sales tax payable, and the sales of taxable, non-taxable and exempt goods in each State for 1941-42 are given in the following table. The figures regarding "Tax payable" are in respect of the periods 1st July to 30th June of each year adjusted on account of rebates of tax allowed in returns to taxpayers as deductions, while those relating to sales are in respect of the periods 1st June to 31st May.



## SALES TAX AND AMOUNT OF SALES, 1941-42.(a)

State, etc.	Gross Taxable Sales.	Non-Taxable Sales.	Sales of Exempt Goods by Registered Persons.	Net Amount of Sales on which Sales Tax was payable.	Tax Collected.		
					Taxation Department.	Customs Department.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
New South Wales ..	108,568	157,349	129,448	101,254	10,946	691	11,637
Victoria ..	86,738	128,133	115,164	80,085	8,601	448	9,049
Queensland ..	25,559	19,122	38,780	24,950	2,482	132	2,614
South Australia ..	18,616	20,857	29,421	17,345	1,860	120	1,980
Western Australia ..	11,810	7,618	17,330	11,452	1,161	61	1,222
Tasmania ..	4,181	4,665	7,541	3,960	379	20	399
Northern Territory	106	..	185	106	9	1	10
Total ..	255,178	337,744	337,869	239,152	25,438	1,473	26,911

(a) The difference between the amount of tax collected and the amount of tax calculated at the ruling rate on the net amount of sales on which tax was payable is due to rebates allowed as deductions from tax without the corresponding deduction from "Net Sales".

Similar details for Australia as a whole for each year 1932-33 to 1941-42 are given in the following table:—

## SALES TAX AND AMOUNT OF SALES, 1932-33 TO 1941-42.

Year.	Gross Taxable Sales.	Non-Taxable Sales.	Sales of Exempt Goods by Registered Persons.	Net Amount of Sales on which Sales Tax was payable.	Tax Collected.		
					Taxation Department.	Customs Department.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1932-33 ..	158,469	135,843	195,285	147,217	8,797	594	9,391
1933-34 ..	162,852	135,877	191,370	150,614	8,166	540	8,706
1934-35 ..	170,256	140,735	202,320	156,791	7,967	614	8,581
1935-36 ..	188,228	156,692	219,756	174,312	8,779	703	9,482
1936-37 ..	187,433	162,046	251,820	174,443	7,522	644	8,166
1937-38 ..	198,083	180,117	283,622	183,479	7,342	707	8,049
1938-39 ..	197,809	171,810	280,282	183,296	8,559	758	9,317
1939-40 ..	207,106	196,790	302,479	192,589	11,177	1,019	12,196
1940-41 ..	223,226	252,368	306,734	209,004	18,562	1,256	19,818
1941-42 ..	255,178	337,744	337,869	239,152	25,438	1,473	26,911

In the foregoing tables exempt sales relate to goods exempted from sales tax under the Sales Tax (Exemptions and Classifications) Act 1935-1943, while non-taxable sales relate to goods on which tax is not payable at the time of sale. In this latter case the sale has been made to a registered taxpayer who has quoted his certificate. These sales, however, become taxable before passing into consumption, unless used for a purpose exempted under the Act.

The figures given in the foregoing tables do not represent the total sales of all commodities, as vendors trading in exempt goods only are not required to be registered and consequently the volume of their sales is not included in the above statistics.

(f) *Flour Tax.* A Flour Tax of £4 5s. per ton operated from 4th December, 1933 to 31st May, 1934, and of £2 12s. 6d. per ton from 7th January, 1935 to 24th February, 1936. On 5th December, 1938, the Flour Tax was again imposed in a more or less permanent form. The new legislation provided for a tax on flour (not exceeding £7 10s. per ton) varying as the price of wheat varies from 5s. 2d. a bushel at Williamstown. The commencing rate was £5 15s. per ton, since when there have been 21 variations, the highest rate being that reached in August, 1939, £6 2s. 9d., and the lowest in December,

1939, £1 12s. 3d. The present rate of £2 8s. 10d. has remained constant since October 1940, chiefly as a result of war conditions and the operation of National Security Regulations relating to the acquisition of the wheat crop by the Commonwealth. Provision is made in another Act for the imposition of a special tax on wheat when world parity rises above 5s. 2d. at Williamstown.

Net collections after allowing for refunds made and tax outstanding were as follows :—

#### FLOUR TAX.

State, etc.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
New South Wales ..	2,400	704,152	951,185	604,887	638,898
Victoria ..	972	531,577	696,428	409,775	457,679
Queensland ..	Dr. 329	237,854	334,040	192,760	220,079
South Australia ..	Dr. 15	141,048	203,964	116,084	135,855
Western Australia ..	Dr. 3	123,856	162,908	95,479	105,584
Tasmania ..	..	55,346	72,220	38,341	43,446
Northern Territory ..	..	..	Dr. 8	..	..
Total ..	3,025	1,793,833	2,420,737	1,457,326	1,601,541

(g) *Wool Levy.* The Wool Tax Acts, assented to in May, 1936, provide for a levy on all wool grown in Australia and shorn on or after 1st July, 1936. The levy is collected through wool-brokers and dealers who furnish quarterly returns on which the levy is assessed. The levy is payable prior to export on wool not previously taxed in the hands of a broker or dealer. The rates applicable are :—6d. per bale ; 3d. per fadge or butt ; and 1d. per bag. Proceeds are devoted to publicity and research in connexion with the wool industry. The amounts levied during the past five years were as follows :—

#### WOOL LEVY.

State.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
New South Wales ..	32,689	28,889	35,175	34,229	35,401
Victoria ..	17,030	15,493	17,236	18,521	18,965
Queensland ..	13,962	14,451	15,738	15,400	15,875
South Australia ..	7,246	8,243	8,613	8,986	8,267
Western Australia ..	5,211	5,795	6,054	5,672	6,007
Tasmania ..	1,385	1,525	1,545	1,471	1,419
Total ..	77,523	74,396	84,361	84,279	85,934

(h) *Pay-roll Tax.* The Pay-roll Tax Assessment Act 1941-1942 and the Pay-roll Tax Act 1941 imposed a Pay-roll tax of 2½ per cent. on all wages, in excess of £20 per week, paid by an employer after 30th June, 1941. These measures formed part of the Commonwealth scheme of child endowment, the revenue from the tax being designed to provide the main part of the money required.

Pay-roll tax is collected in a similar manner to sales tax. Employers are required to register and to furnish a monthly return of all wages paid. The amount of tax received in each State during 1941-42 was as follows :—New South Wales, £3,848,621 ; Victoria, £2,575,830 ; Queensland, £1,057,442 ; South Australia, £726,184 ; Western Australia, £521,206 ; Tasmania, £217,245 ; Northern Territory, £8,249, and total, £8,954,777.

(i) *Gift Duty.* The Gift Duty Assessment Act 1941-1942 and the Gift Duty Act 1941 imposed a Gift Duty on all gifts made after the 29th October, 1941. A gift has been defined as any disposition of property, which is made otherwise than by will, without adequate consideration in money or money's worth.

Both the donor and donee are liable to furnish returns and pay the duty.

The following rates of duty have been fixed.

Value of all Gifts made within Eighteen Months.						Rate of Duty.
Does not exceed £500	..	..	..	..	..	Nil.
£501 to £10,000	..	..	..	..	..	3%
£10,001 to £20,000	..	..	..	..	..	3% to 6%
£20,001 to £120,000	..	..	..	..	..	6% to 26%
£120,001 to £500,000	..	..	..	..	..	26% to 27.9%
£500,001 and over	..	..	..	..	..	27.9%

Duty received during 1941-42 amounted to £79,332.

(j) *Gold Tax.* The Gold Tax Collection Act 1939-1940 and the Gold Tax Act 1939 impose a tax on all gold, delivered to the Commonwealth Bank of Australia or to an agent of that bank on and after 15th September, 1939, of 50 per cent. of the amount by which the price payable by the bank for each fine ounce of gold delivered exceeds £9. The amounts of tax collected during 1940-41 and 1941-42 respectively were £1,452,260 and £1,030,425.

(k) *Entertainments Tax.* The Entertainments Tax Assessment Act 1942 and Entertainments Tax Act 1942 came into force on 1st October, 1942, following the agreement of the State Governments to the request of the Commonwealth to suspend their Entertainments Tax legislation for the duration of the war and one year after, thereby enabling the Commonwealth Government to re-enter this field of taxation. The Commonwealth will recompense the States by annual payments of £765,787 equal to the amount collected by the States during the year 1941-42. The tax imposed commences with 3d. on an admission price of 1s. and increases thereafter by 2d. for every 6d. or part thereof in excess of 1s. up to 5s. Thereafter the rate increases by 3d. for every 6d. or part thereof. Special rates, approximately 25 per cent. less than those stated above are imposed in respect of performances on the legitimate stage and similar types of entertainment.

For that part of the year 1942-43 during which the new tax was in operation the Commonwealth collected £2,994,426. Compensation amounting to £574,341 was paid to the States.

3. *Business Undertakings.*—(i) *Postal Revenue.* Particulars concerning this branch of revenue for each of the financial years from 1937-38 to 1941-42 are contained in the following table:—

#### COMMONWEALTH POSTAL REVENUE.

Particulars.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Private boxes and bags ..	73,039	74,235	74,799	74,371	74,831
Commission on money orders and postal notes ..	280,533	288,580	287,441	283,756	293,443
Telegraphs ..	1,377,623	1,372,300	1,401,204	1,481,660	1,828,815
Telephones ..	7,571,635	8,039,580	8,482,940	8,868,183	9,687,262
Postage ..	6,498,212	6,635,977	6,660,807	7,133,458	8,561,742
Radio ..	492,995	516,178	549,439	697,874	634,777
Miscellaneous ..	459,102	439,461	440,839	536,239	558,494
<b>Total ..</b>	<b>16,753,139</b>	<b>17,366,311</b>	<b>17,897,469</b>	<b>19,075,541</b>	<b>21,639,364</b>

The foregoing particulars have been amended to include repayments of the States' proportion of pensions and contributions of officers towards pensions under State Acts.



Further particulars of Postal Revenue are given in Chapter V. "Transport and Communication".

(ii) *Railway Revenue.* The Commonwealth Government is responsible for four lines—the Trans-Australian, the Central Australia, the North Australia and the Australian Capital Territory lines. The following table shows the amounts paid into the credit of the Consolidated Revenue Fund on account of each of these railways for the last five years :—

#### COMMONWEALTH RAILWAY REVENUE.

Railway.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Trans-Australian.. ..	267,754	330,643	368,218	462,344	694,228
Central Australia.. ..	124,417	137,521	146,921	243,701	742,143
North Australia .. ..	37,768	50,471	60,797	185,808	305,448
Australian Capital Territory	5,803	7,275	11,736	8,040	5,277
<b>Total .. ..</b>	<b>435,742</b>	<b>525,910</b>	<b>587,672</b>	<b>899,893</b>	<b>1,747,096</b>

Further particulars are given in Chapter V. "Transport and Communication", (part B, Railways).

4. *Other Sources of Revenue.*—Of other sources of revenue, amounting in 1941-42 to £6,727,195, the following are noteworthy: Interest, £997,516; Coinage, £867,889; Defence, £834,800; Net Profit on Australian Note Issue, £1,658,141 and Balance of Trust Accounts, £1,600,459.

#### Division III.—Expenditure.

1. *Nature of Commonwealth Expenditure.*—The disbursements by the Commonwealth Government of the revenue collected by it fell naturally, under the "book-keeping" system, into three classes, namely :—

(a) Expenditure on transferred services; (b) Expenditure on new services; and (c) Payment to States of surplus revenue.

Of these three, only the first two were actual expenditure, the last being merely a transfer, the actual expenditure being incurred by the States. In accordance with the provisions of the Constitution, the expenditure on transferred services was, under the "book-keeping" system, debited to the several States in respect of which such expenditure was incurred, while the expenditure on new services was distributed *per capita*. Surplus Commonwealth revenue was paid to the States monthly. Until the end of the year 1903-4, new works, etc., for transferred departments were treated as transferred expenditure, and were charged to the States on whose behalf the expenditure had been incurred. In subsequent years all such expenditure was regarded as expenditure on new services, and distributed amongst the States *per capita*. Under the arrangement which superseded the "book-keeping" system, a specific subsidy of 25s. per head of population was made annually by the Commonwealth to the States, and there was no further debiting of expenditure to the several States. The States Grants Act 1927 provided for the abolition of the *per capita* payments as from 30th June, 1927. From 1st July, 1928, the temporary provisions of the agreement between the Commonwealth and the several States under the Financial Agreement Act 1928 were operative, and on 1st July, 1929, the Commonwealth Government took over the debts of the States under this agreement which was ratified by all Governments concerned.

2. *Details of Expenditure from Consolidated Revenue.*—(i) *General.* The following table gives details of the expenditure from Consolidated Revenue during the last five years. The "Balance of Interest on States' Debts" (recoverable from the States) is placed at the foot of the table, but is not included in the "Grand Total". Details for each Department, at 30th June, 1942, are given on pages 553 to 560.

\* For an exposition of the "book-keeping system" see Official Year Book No. 6, p. 780.

## COMMONWEALTH EXPENDITURE FROM CONSOLIDATED REVENUE.

Departments, etc.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
War and Repatriation (1914-19) Services (a) .. .. .	£ 18,948,300	£ 19,256,812	£ 18,834,542	£ 18,602,630	£ 18,618,302
Defence and War (1939-42) Services—					
War Services (1939-42) .. .. .	.. .. .	.. .. .	15,315,993	} 65,680,917	} 109,233,539
Army (including Co-ordination) .. .. .	2,060,732	3,324,650	3,770,594		
Navy .. .. .	2,497,783	2,755,085	3,005,000		
Air .. .. .	1,289,973	1,384,971	2,043,839		
Supply and Shipping (including Munitions and Aircraft Production)	523,550	596,653	748,415		
Total Cost of Departments—					
Governor-General .. .. .	35,067	32,765	30,787	30,587	30,705
Parliament .. .. .	516,494	444,873	449,876	547,602	473,163
Prime Minister .. .. .	1,510,259	1,355,842	1,509,582	1,282,799	1,350,017
External Affairs .. .. .	58,263	70,168	117,782	141,751	199,612
Treasury .. .. .	2,252,506	2,257,628	2,485,450	2,425,259	2,948,933
Attorney-General .. .. .	263,319	281,497	276,557	297,400	319,171
Interior .. .. .	1,018,526	1,275,392	1,257,593	962,999	951,817
Civil Aviation .. .. .	129,043	328,150	494,060	392,038	337,165
Trade and Customs .. .. .	993,593	1,064,124	1,032,890	963,269	956,081
Health .. .. .	402,003	338,155	289,174	295,932	299,856
Commerce and Agriculture .. .. .	938,245	994,095	951,210	911,121	975,924
Social Services Administrative .. .. .	150,753	324,734	177,901	161,786	281,742
Invalid and Old-age Pensions .. .. .	15,798,687	15,991,782	16,459,245	17,366,365	19,257,025
Maternity Allowances .. .. .	400,004	436,614	416,904	407,533	358,538
Child Endowment .. .. .	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .
Supply and Shipping .. .. .	211,266	214,832	216,741	229,311	240,716
Business Undertakings—					
Postmaster-General .. .. .	13,964,473	15,028,233	15,285,709	15,876,594	17,527,865
Railways .. .. .	1,140,315	1,351,041	1,472,521	1,507,850	1,995,577
Total, Business Undertakings .. .. .	15,104,788	16,379,274	16,758,230	17,384,444	19,523,442
Territories—					
Australian Capital Territory .. .. .	615,401	637,228	656,078	679,160	698,072
Northern Territory .. .. .	381,931	402,899	382,804	462,170	520,021
Papua .. .. .	48,825	48,830	48,610	85,703	38,839
New Guinea .. .. .	5,058	5,532	5,988	7,162	17,048
Norfolk Island .. .. .	5,911	5,471	4,071	4,071	5,666
Total, Territories .. .. .	1,057,126	1,099,960	1,097,551	1,238,266	1,279,646
New Works .. .. .	3,551,776	6,565,268	6,036,445	6,321,764	6,305,344
Payments to or for States—					
Interest on States' Debts .. .. .	7,584,912	7,584,912	7,584,912	7,584,912	7,584,912
Sinking Fund on States' Debts .. .. .	1,454,385	1,477,976	1,536,055	1,556,749	1,579,797
Special Grants .. .. .	2,350,000	2,020,000	2,020,000	2,050,000	2,300,000
Federal Aid Roads .. .. .	4,149,492	4,266,556	4,455,845	3,484,748	2,128,344
Other Grants .. .. .	450,500	300,000	100,000	250,000	138,100
Total to or for States (c) .. .. .	15,989,289	15,649,444	15,696,812	14,926,409	13,731,153
Relief to Primary Producers .. .. .	262,166	2,014,713	2,509,266	3,022,624	4,063,155
Grand Total (d) .. .. .	85,963,421	94,437,481	108,985,409	150,482,306	210,040,969
Per Head of Population .. .. .	£ s. d. 12 10 6	£ s. d. 13 12 8	£ s. d. 15 11 9	£ s. d. 21 5 10	£ s. d. 29 8 7
Excess Receipts .. .. .	3,494,733	627,309	2,928,375	.. .. .	.. .. .
Balance of Interest on States' Debts—payable by States .. .. .	25,580,374	25,584,456	26,299,098	26,416,544	25,939,364

(a) For details see § 5. (b) Excludes Defence and War (1939-42) Services. (c) Excludes balance of interest payable on States' Debts (recoverable from States). (d) Excludes amounts expended from excess receipts of previous years (see page 541.).

The items included under the general heads above are referred to in some detail later. Particulars for each department do not include the expenditure on new works which is given in (iii), page 560..

(ii) *Total Cost of Departments.*—(a) *Governor-General.* Section 30 of the Constitution enacts that, until the Commonwealth Parliament otherwise provides, there shall be payable out of the Consolidated Revenue Fund for the salary of the Governor-General an annual sum of ten thousand pounds, and a proviso is made that the salary of the Governor-General shall not be altered during his continuance in office. The expenditure in connexion with the Governor-General and establishment for the five years 1937-38 to 1941-42 was as follows:—

## EXPENDITURE : GOVERNOR-GENERAL AND ESTABLISHMENT.

Details.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Salary .. .. .	10,000	10,000	10,000	10,000	10,000
Government House maintenance ..	15,350	12,305	11,379	11,643	12,264
Governor-General's office (a) ..	5,003	5,381	4,746	4,389	3,910
Interest and Sinking Fund ..	4,714	5,079	4,662	4,555	4,531
<b>Total .. .. .</b>	<b>35,067</b>	<b>32,765</b>	<b>30,787</b>	<b>30,587</b>	<b>30,705</b>

(a) Represents official services outside the Governor-General's personal interests, and carried out mainly at the instance of the Government.

(b) *Parliament.* Under this head have been grouped all the items of expenditure connected with the parliamentary government of Australia for the last five years. Although the administration of the Electoral Act and the conduct of elections come within the functions of the Department of the Interior, the expenditure in connexion therewith is fundamentally incurred on account of the parliamentary government system, and for that reason is included herein.

## EXPENDITURE : COMMONWEALTH PARLIAMENT.

Details.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Salaries of Ministers .. ..	15,782	19,325	19,941	19,738	22,750
Allowances to Senators .. ..	33,877	36,171	36,200	36,200	36,199
Allowances to Members of House of Representatives .. ..	70,058	74,900	75,211	74,631	75,399
Officers, staff, contingencies, etc.	64,183	71,120	69,958	71,978	86,238
Rent, repairs, maintenance, etc.	12,873	14,679	18,560	20,702	20,202
Printing .. .. .	22,217	22,000	22,815	14,359	23,608
Travelling expenses of Members	33,347	41,429	40,215	40,254	44,056
Electoral Office .. .. .	86,102	85,143	86,164	89,577	90,268
Election expenses .. .. .	101,628	3,232	978	109,293	..
Administration of Electoral Act	29,391	20,029	30,066	23,115	26,140
Interest and Sinking Fund ..	38,463	41,444	38,016	37,125	36,923
Miscellaneous .. .. .	8,573	15,401	11,752	10,630	11,380
<b>Total .. .. .</b>	<b>516,494</b>	<b>444,873</b>	<b>449,876</b>	<b>547,602</b>	<b>473,163</b>

In Section 66 of the Constitution provision is made for the payment from Consolidated Revenue of an annual sum for the salaries of Ministers, and Section 48 specifies the amount of the allowance to each Senator and each Member of the House of Representatives. These amounts, together with subsequent increases, will be found on pp. 14 and 17 of this volume.



(c) *Prime Minister's Department.* This department was created during the financial year 1911-12. In addition to the services indicated below, this department administers the external Territories of New Guinea, Papua, Nauru, and Norfolk Island. For convenience, particulars of expenditure on account of these Territories are shown below under that heading. The expenditure for the last five years is shown in the following table:—

## EXPENDITURE : PRIME MINISTER'S DEPARTMENT.(a)

Details.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Salaries, contingencies and miscellaneous .. .. .	6398,207	160,842	153,104	157,958	141,009
Audit Office .. .. .	38,046	38,434	35,697	37,241	35,026
Rent, repairs, etc. .. .. .	6,508	8,120	10,789	8,723	8,626
Public Service Board's Office .. .. .	52,807	50,688	50,972	48,304	48,898
High Commissioner's Office .. .. .	57,945	81,369	90,482	84,037	91,214
Mail Service, Pacific Islands .. .. .	49,346	49,077	41,159	38,456	39,102
Scientific and Industrial Research—					
Council .. .. .	177,435	197,764	242,808	319,323	395,036
Contributions, Grants, etc. .. .. .	74,115	75,379	71,736	69,800	105,280
Pensions and Superannuation .. .. .	9,772	10,473	10,702	10,290	10,536
North Australia Survey .. .. .	25,000	10,000	10,000	20,000	..
National Oil Pty. Ltd. Agreement .. .. .	..	60,000	274,000	..	..
Interest and Sinking Fund .. .. .	630,018	613,696	518,133	488,607	475,200
<b>Total .. .. .</b>	<b>1,510,259</b>	<b>1,355,842</b>	<b>1,509,582</b>	<b>1,282,799</b>	<b>1,350,017</b>

(a) Excludes Territories, see page 560.

(b) Includes special appropriation of £250,000 for Science and Industry.

(d) *Department of External Affairs.* The Department of External Affairs was separated from the Prime Minister's Department in 1935-36. Its functions include, *inter alia*, communications with British diplomatic missions and consulates on political matters, foreign affairs, inter-Imperial and Dominion political relations, treaties and international agreements, and League of Nations matters, etc. Representatives of Australia are now installed in the United States of America, Canada, Russia, China, India and New Zealand. There is also a Minister to the Netherlands. At the outbreak of war with Japan there was a legation at Tokio which was installed during 1940-41. Expenditure of the department for the years 1937-38 to 1941-42 are given in the following table:—

## EXPENDITURE : EXTERNAL AFFAIRS.

Details:	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Salaries and General—					
Administrative .. .. .	14,215	20,129	19,964	24,268	36,490
Legation, United States of America .. .. .	..	..	11,917	34,807	60,997
Legation, Japan .. .. .	..	..	..	23,456	15,763
Legation, China .. .. .	..	..	..	..	25,302
High Commissioner, Canada .. .. .	..	..	7,254	15,517	13,892
Contribution, League of Nations Secretariat .. .. .	34,112	43,329	44,870	38,823	34,018
Miscellaneous .. .. .	9,936	6,710	(a) 33,777	4,880	13,180
<b>Total .. .. .</b>	<b>58,263</b>	<b>70,168</b>	<b>117,782</b>	<b>141,751</b>	<b>199,642</b>

(a) Includes Grants of £10,000 to the Finnish Government for Red Cross purposes, £10,000 to the Polish Government for relief of distress and £9,597 to the Turkish Government for relief of distress caused by earthquake.

(e) *Department of the Treasury.* The sub-departments under the control of the Commonwealth Treasurer are the Treasury, the Supply and Tender Board, Taxation Office, Superannuation Fund Management Board, and the Bureau of Census and Statistics which was transferred from the Department of Home Affairs on 13th April, 1932. The Government Printing Office is also a sub-department of the Treasury, but its expenditure is charged to Parliament and the Departments concerned. The Pensions and Maternity Allowance Office was transferred from the Treasury to the Department of Social Services which was created during 1940-41. Details of the expenditure of the Treasury for the last five years are given in the following table :—

## EXPENDITURE : DEPARTMENT OF THE TREASURY.

Details.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	
Treasury .. ..	52,234	56,528	66,400	76,087	74,109
Taxation Office .. ..	595,238	618,537	631,692	779,849	1,005,964
Superannuation Board .. ..	7,987	8,623	7,691	7,709	7,576
Census and Statistics .. ..	47,696	60,939	62,589	66,312	64,095
Census .. ..	9,789	4,113	1,387	1,392	573
Rent, repairs, etc. .. ..	12,165	23,088	11,900	13,016	32,469
Interest and Sinking Fund .. ..	675,250	911,004	957,002	973,077	983,364
Exchange .. ..	579,668	514,240	482,427	194,860	517,939
Loan Conversion expenses .. ..	120,522	1,588	..	..	24,398
Gold Tax collection .. ..	..	..	182,491	227,593	121,777
Miscellaneous .. ..	(a) 145,957	58,968	81,871	85,364	116,669
Total .. ..	2,252,506	2,257,628	2,485,450	2,425,259	2,948,933

(a) Includes £96,602 Works and Services.

(f) *Attorney-General's Department.* Details for the five years 1937-38 to 1941-42 are furnished below :—

## EXPENDITURE : ATTORNEY-GENERAL'S DEPARTMENT.

Details.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Attorney-General's Office .. ..	19,307	19,699	20,438	26,893	31,443
Crown Solicitor's Office .. ..	24,869	27,642	28,219	33,025	41,523
Salaries of Justices of High Court .. ..	18,500	18,500	18,500	15,928	16,452
High Court expenses .. ..	16,639	15,615	15,248	13,307	13,309
Court of Conciliation and Arbitration .. ..	22,372	24,046	26,052	32,406	39,267
Public Service Arbitrator's Office .. ..	3,721	5,919	3,932	3,459	3,670
Rent, repairs, etc. .. ..	14,539	15,131	15,137	16,782	19,770
Patents, Trade Marks, etc. .. ..	67,686	71,126	63,635	60,430	52,345
Investigation Branch .. ..	13,336	16,219	19,098	23,224	26,655
Bankruptcy .. ..	42,249	44,551	44,126	42,533	43,080
Reporting Branch .. ..	11,115	13,922	13,371	20,224	21,224
Miscellaneous .. ..	8,986	9,127	8,801	9,189	10,433
Total .. ..	263,319	281,497	276,557	297,400	319,171

(g) *Department of the Interior.* In April, 1932, the Departments of Home Affairs and Works were abolished, and the services under the control of these departments were assumed by a new department called the Department of the Interior. The Bureau of Census and Statistics, formerly under the Department of Home Affairs, was, however, transferred to the Department of the Treasury. The Commonwealth Railways and the Northern and Australian Capital Territories, which are administered by the Department of the Interior, are for convenience respectively included under Railways (n) and Territories (o) below. Expenditure in connexion with the Electoral Office, which is administered by the Department of the Interior, is included under Parliament, in (b) above.

Particulars of the expenditure for the last five years on services under the control of this Department are as follows:—

## EXPENDITURE : DEPARTMENT OF THE INTERIOR.(a)

Details.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Salaries, Contingencies and Miscellaneous—	£	£	£	£	£
Administrative ..	204,553	380,550	462,441	220,948	208,688
Meteorological Bureau ..	60,675	80,107	43,938	(b)	(b)
Solar Observatory ..	6,587	6,816	8,793	8,095	7,224
Forestry Branch ..	8,009	10,436	10,545	12,308	12,086
Rent, repairs and maintenance ..	14,851	17,618	18,537	26,368	37,703
Pensions and Retiring Allowances (c) ..	19,985	20,567	21,033	21,623	21,072
Interest ..	637,926	690,061	619,607	597,323	587,923
Sinking Fund ..	65,940	69,237	72,699	76,334	80,151
Total ..	1,018,526	1,275,392	1,257,593	902,909	954,847

(a) Excludes Territories, Railways and Electoral Office.  
of Air.

(c) Includes Superannuation.

(b) Provided under Department

(h) *Civil Aviation.* Particulars of expenditure on Civil Aviation for the years 1937-38 to 1941-42 are as follows:—

## EXPENDITURE : DEPARTMENT OF CIVIL AVIATION.

Details.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Salaries and general—administrative ..	£	£	£	£	£
Development and maintenance of Civil Aviation ..	71,862	89,946	133,124	140,514	160,183
Meteorological Services ..	42,816	162,232	238,134	150,801	73,434
Empire Air Services ..	..	..	58,000	58,560	56,975
Rent, repairs and maintenance ..	1,927	55,919	41,465	18,277	22,130
Interest and Sinking Fund ..	6,570	8,428	12,674	13,474	11,088
Total ..	5,868	11,625	10,663	10,412	10,355
	129,043	328,150	494,060	392,038	337,165

(i) *Department of Trade and Customs.* Under this head have been included the expenditure of all the sub-departments under the control of the Minister for Trade and Customs, in addition to the amounts payable as bounties and the expenses in connexion therewith. Particulars for the five years 1937-38 to 1941-42 are given in the following table:—

## EXPENDITURE : DEPARTMENT OF TRADE AND CUSTOMS.

Details.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Central Office ..	£	£	£	£	£
Tariff Board ..	71,110	70,298	80,111	76,943	60,922
Film censorship ..	13,154	13,252	12,131	10,340	10,571
Customs—States ..	4,491	4,466	4,502	4,698	4,972
Audit (proportion) ..	589,475	621,425	629,955	617,322	600,569
Pensions and Superannuation ..	12,000	11,786	11,400	11,150	10,501
Rent, repairs, etc. ..	44,906	45,063	47,008	46,859	46,368
Bounties and Subsidies ..	11,096	7,373	7,075	7,756	9,227
Interest and Sinking Fund ..	210,485	225,636	134,809	58,737	85,113
Remissions of duty on materials for Commonwealth Government ship construction ..	31,870	34,321	31,535	30,827	30,683
Other remissions of duty ..	..	26,702	70,419	86,022	47,368
Miscellaneous ..	3,534	2,066	2,675	11,237	48,462
Total ..	1,382	1,736	1,270	1,378	1,325
	993,503	1,064,124	1,032,890	963,269	956,081



(j) *Department of Health.* This department came into existence in the financial year 1921-22. Details of expenditure for the last five years are as follows :—

## EXPENDITURE : DEPARTMENT OF HEALTH.

Details.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Central Administration ..	40,308	42,456	43,134	40,642	41,329
States—Salaries, General expenses, &c. ..	88,414	93,050	91,907	98,484	102,236
Interest and Sinking Fund ..	22,255	23,661	22,117	21,742	21,682
Rent and repairs ..	12,284	14,102	10,907	9,229	13,705
Pensions and Superannuation	2,664	2,870	3,015	3,209	3,398
Subsidy, Cattle Tick Control ..	69,450	69,450	59,450	61,783	61,783
Medical Research ..	30,000	30,000	10,000	20,000	20,000
Aerial Medical Services subsidy ..	5,000	5,000	7,500	7,500	7,500
Miscellaneous ..	(a) 131,628	(b) 57,566	(c) 41,144	(d) 33,343	(e) 28,223
Total ..	402,003	338,155	289,174	295,932	299,856

(a) Includes National Health Campaign, £100,000. (b) Includes reserve of essential drugs and medical equipment, £39,430. (c) Includes reserve of drugs, etc., £13,445 and Commonwealth Council for National Fitness, £18,222. (d) Includes Commonwealth Council for National Fitness, £19,547. (e) Includes Commonwealth Council for National Fitness, £18,633.

Other items included in "Miscellaneous" are expenses in connexion with the Commonwealth X-ray and Radium Laboratory, maternal and infant hygiene, nutrition investigations, etc.

(k) *Department of Commerce.* The Department of Commerce was created in April, 1932, by the amalgamation of the Departments of Markets and of Transport. Commonwealth Railways, formerly administered by the Minister for Transport, were transferred to the control of the Minister for the Interior on the amalgamation in 1932. Some details relating to the creation of the Departments of Markets and Transport are given in Official Year Book No. 25, pp. 295-6. Particulars of the expenditure of the Department of Commerce for the last five years are given below :—

## EXPENDITURE : DEPARTMENT OF COMMERCE.

Details.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Administrative ..	49,916	58,218	51,683	50,523	63,230
Marine ..	206,966	208,129	211,506	225,005	236,825
Administration of Commerce (Trade Descriptions) Act	168,216	174,876	190,274	200,691	210,697
Australian National Publicity Association ..	20,000	20,000	15,000	8,300	4,000
Overseas trade publicity ..	37,500	47,016	17,000	..	..
Commercial intelligence service abroad ..	38,795	47,248	49,827	58,679	55,385
Wool publicity and research	77,921	73,816	83,577	84,496	84,965
Fruit bounties ..	65,900	10,462	4,057	1,955	41
Rent, repairs, maintenance, etc. ..	11,679	18,386	16,461	13,810	16,734
Pensions and Retiring Allowances ..	11,714	12,959	13,008	13,385	13,358
Interest ..	191,637	198,599	189,092	186,058	235,656
Sinking Fund ..	233,718	245,404	257,669	276,897	293,722
All Other ..	35,549	(a) 93,814	(b) 71,797	20,133	2,027
Total ..	1,140,511	1,208,927	1,170,951	1,139,932	1,216,640

(a) Includes representation at New York World's Fair, £30,780, and San Francisco Exhibition, £21,335. (b) Includes representation at New Zealand Centenary Exhibition, £44,074, and New York World's Fair, £14,359.

During 1942-43, activities relating to Supply and Shipping were transferred from the Department of Commerce and a new department was created. The expenditure

which, for purposes of comparison, could be allocated to the new Department during the years 1937-38 to 1941-42 was as follows:—1937-38, £211,266; 1938-39, £214,832; 1939-40, £216,741; 1940-41, £229,311; 1941-42, £240,716. These amounts were expended mainly on the salaries and general expenses of the Marine Branch.

(l) *Department of Social Services.* This Department, constituted during 1940-41, includes the Invalid and Old-age Pension and Maternity Allowance Office, formerly administered by the Treasury Department. It also deals with Child Endowment, Widows' Pensions, National Health and Pensions Insurance, National Housing, Civil Defence Workers' Compensation, War Injuries Compensation, payments to unemployed persons as a result of Government restrictions on non-essential production and sustenance and after care of evacuees. Particulars of expenditure during the last five years are as follows:—

## EXPENDITURE : DEPARTMENT OF SOCIAL SERVICES.

Details.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Administrative .. ..	..	..	..	1,481	9,440
Child Endowment Section ..	..	..	..	8,191	129,183
Invalid and Old-age Pension and Maternity Allowance Office .. ..	133,864	138,634	140,775	140,268	126,217
Miscellaneous .. ..	16,889	186,100	37,126	11,846	16,902
Departmental Expenditure	150,753	324,734	177,901	161,786	281,742
Invalid and Old-age Pensions	15,798,687	15,991,782	16,459,245	17,366,365	19,257,025
Maternity Allowances ..	400,004	436,614	416,964	407,533	358,538
Child Endowment .. ..	..	..	..	..	11,302,863
Total .. ..	16,349,444	16,753,130	17,054,110	17,935,684	31,200,168

(m) *Postmaster-General's Department.* Details of the expenditure of this department for the last five years are given in the following table:—

## EXPENDITURE : POSTMASTER-GENERAL'S DEPARTMENT.

Details.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Salaries, stores and materials, mail engineering services, etc. .. ..	10,462,332	11,563,510	11,648,240	12,064,570	13,603,018
Public Works Staff—salaries, etc. .. ..	60,000	60,000	60,000	60,000	60,000
Audit (proportion) .. ..	10,650	11,660	12,000	12,100	13,100
Pensions and Retiring Allowances .. ..	79,035	75,113	67,782	61,729	57,194
Superannuation .. ..	301,078	316,747	333,345	347,789	349,222
Rents, repairs, etc. .. ..	117,352	114,183	100,306	106,791	118,182
Interest .. ..	1,462,843	1,398,690	1,401,196	1,426,542	1,421,282
Sinking Fund .. ..	1,075,248	1,128,933	1,213,878	1,304,360	1,384,942
Exchange .. ..	395,935	359,397	448,962	492,713	488,242
Loans' Redemption and Conversion Expenses .. ..	..	..	..	..	32,683
Total .. ..	13,964,473	15,028,233	15,285,709	15,876,594	17,527,865

Further details of expenditure on account of the Postmaster-General's Department appear in Chapter V. "Transport and Communication".

(n) *Railways.* In 1928-29 the Commonwealth Railways were transferred from the Department of Works and Railways to the Department of Markets and Transport. In April, 1932, the administration was placed under the Department of the Interior. The expenditure on railways for the last five years is shown below as distinct from the expenditure of the other services controlled by the latter department.

## EXPENDITURE : COMMONWEALTH RAILWAYS.

Details.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Working Expenses—					
Trans-Australian .. ..	381,404	493,463	527,272	547,681	647,685
North Australia .. ..	40,281	55,186	91,404	123,048	239,153
Central Australia .. ..	161,251	214,374	216,728	225,405	458,345
Australian Capital Territory ..	5,754	7,305	8,486	9,026	8,804
Interest .. ..	385,195	392,194	395,323	388,966	387,665
Sinking Fund .. ..	71,648	75,230	78,991	82,939	87,075
Exchange .. ..	55,875	62,674	83,193	88,158	88,328
Contribution to South Australia (Port Augusta-Port Pirie Rail- way) .. ..	20,000	20,000	20,000	20,000	20,000
Superannuation .. ..	12,977	13,467	13,982	14,405	15,289
Miscellaneous .. ..	5,930	17,088	37,142	8,222	43,233
Total .. ..	1,140,315	1,351,041	1,472,521	1,507,850	1,995,577

Additional details of the financial operations of the Commonwealth Railways are given in Chapter V. "Transport and Communication".

(o) *Territories.* The following table shows the expenditure on account of territorial services for the last five years. The internal territories are administered by the Department of the Interior, and the Prime Minister's Department controls the external territories. The expenditure has been grouped in one table for convenience. Information in greater detail will be found in the *Finance Bulletin* No. 33, issued by this Bureau.

## EXPENDITURE : TERRITORIES.

Details.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Internal—					
Australian Capital (a) ..	615,401	637,228	656,078	679,160	698,072
Northern (a) .. ..	381,931	402,899	382,804	462,170	520,021
External—					
Papua .. ..	48,825	48,830	48,610	85,703	38,839
New Guinea .. ..	5,058	5,532	5,988	7,162	17,048
Norfolk Island .. ..	5,911	5,471	4,071	4,071	5,666
Total .. ..	1,057,126	1,099,960	1,097,551	1,238,266	1,279,646

(a) Excludes Railways.

(iii) *New Works.* The expenditure on additions, new works, etc., during the last five years was as follows:—1937-38, £3,551,776 (excluding £1,000,000 provided from excess receipts for Post Office works); 1938-39, £6,565,268 (excluding £3,494,733 provided from excess receipts for Defence equipment); 1939-40, £3,036,445 (excluding £627,309 provided from excess receipts for Defence equipment); 1940-41, £3,211,764 (excluding £2,928,375 provided from excess receipts for Defence equipment); and 1941-42, £3,305,344. Particulars for the last three years exclude expenditure in connexion with Defence and War (1939-42) Services, which was provided for by Loan and Trust Funds.

(iv) *Defence and War (1939-42) Services.* Full details concerning the expenditure from Consolidated Revenue upon War and Repatriation (1914-19) will be found in § 5.

Under the heading of Defence and War (1939-1942) are listed particulars of the Departments of Defence, Navy, Army, Air, Munitions, Aircraft Production, Supply and Shipping and Home Security. Expenditure on defence and war by other departments, including Labour and National Service, Information, War Organization of Industry, etc., is included under the heading of Other War (1939-42) Services.



The table hereunder shows, for the last five years, particulars of the expenditure from revenue, trust and loan funds, combined, on Defence and War Services, including works. Details of expenditure for the years 1940-41 and 1941-42 were not allotted to the various funds, and the total expenditure only was apportioned. Particulars of expenditure from the combined funds in earlier years have been shown below for the purposes of comparison. No details are available for publication in respect of the Departments of the Navy, Army, Air, Munitions and Aircraft Production for the year 1941-42.

### EXPENDITURE FROM REVENUE, TRUST AND LOAN FUNDS : DEFENCE AND WAR (1939-42) SERVICES.

Details.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
<b>Defence—</b>	£	£	£	£	£
Administrative .. .. .	29,986	41,223	114,675	137,494	117,255
Publicity Censorship .. .. .	..	..	..	..	9,109
National Register .. .. .	..	4,410	60,828	(a)	(a)
Man power Committee .. .. .	..	..	14,686	36,614	49,167
Home Security .. .. .	..	..	..	5,880	(b)
Medical Equipment Control Committee .. .. .	..	..	..	17,156	101,083
Buildings, works, etc. .. .. .	2,413	11,390	40,595	127,984	72,479
Rent, repairs and maintenance .. .. .	2,764	3,885	2,897	6,069	9,127
Superannuation and audit .. .. .	..	..	3,749	3,565	4,354
<b>Total .. .. .</b>	<b>35,163</b>	<b>60,908</b>	<b>237,430</b>	<b>334,762</b>	<b>362,574</b>
<b>Navy—</b>					
Salaries, pay, general expenses, services, etc. .. .. .	2,215,156	2,592,328	5,937,787	9,088,110	..
Auxiliary vessels for naval defence purposes .. .. .	..	..	828,065	773,733	..
Transport services .. .. .	..	..	812,309	6,987,106	..
Naval construction and additions to fleet .. .. .	986,990	2,075,681	2,887,359	3,470,991	..
Construction of graving dock .. .. .	..	..	..	434,553	..
Other buildings, works, etc. .. .. .	..	..	617,899	775,027	..
Audit (Proportion) .. .. .	2,634	2,475	2,672	2,678	..
Pensions and Retiring Allowances(d) .. .. .	4,309	4,578	4,643	4,538	..
Rent, repairs, etc. .. .. .	15,465	28,072	28,717	42,939	..
Interest and Sinking Fund .. .. .	91,550	127,632	139,775	136,355	..
Exchange .. .. .	168,669	(c)	(c)	(c)	..
Miscellaneous .. .. .	..	..	269,541	258,097	..
<b>Total .. .. .</b>	<b>3,484,773</b>	<b>4,830,766</b>	<b>11,528,767</b>	<b>21,974,127</b>	<b>..</b>
<b>Army—</b>					
Salaries, pay, general expenses, services, etc. .. .. .	1,670,933	2,941,264	13,466,482	49,850,293	..
Internees and prisoners of war—maintenance .. .. .	..	..	5,059	129,560	..
Arms, armament, ammunition, mechanization, etc. .. .. .	400,283	1,129,542	8,537,256	30,971,766	..
Buildings, works, etc. .. .. .	408,010	417,379	4,044,811	7,248,807	..
Audit (Proportion) .. .. .	7,610	6,110	12,145	12,173	..
Pensions and Retiring Allowances (d) .. .. .	52,187	54,835	49,863	49,420	..
Rent, repairs, etc. .. .. .	46,652	65,117	117,545	102,989	..
Interest and Sinking Fund .. .. .	170,661	207,806	214,270	209,122	..
Exchange .. .. .	79,939	(c)	(c)	(c)	..
<b>Total .. .. .</b>	<b>2,836,275</b>	<b>4,822,053</b>	<b>26,447,431</b>	<b>88,574,130</b>	<b>..</b>
<b>Air—</b>					
Salaries, pay, general expenses, services, etc. .. .. .	983,008	1,303,577	2,438,215	9,454,104	..
Maintenance of R.A.A.F. Squadrons overseas .. .. .	..	..	(e)	1,140,913	..
Training of R.A.A.F. personnel in Canada .. .. .	..	..	552,869	4,111,379	..
Aircraft, equipment and stores .. .. .	..	..	6,784,447	12,426,433	..
Buildings, works, etc. .. .. .	1,155,484	1,538,411	1,747,591	4,719,830	..
Audit .. .. .	..	..	2,186	2,300	..
Rent, repairs, etc. .. .. .	11,772	11,777	13,433	38,998	..
Interest and Sinking Fund .. .. .	28,297	64,119	75,295	73,470	..
Exchange .. .. .	262,093	(c)	(c)	(c)	..
Superannuation .. .. .	4,803	5,498	7,606	8,714	..
<b>Total .. .. .</b>	<b>2,445,457</b>	<b>2,923,382</b>	<b>11,621,642</b>	<b>31,976,141</b>	<b>..</b>

(a) Provided under Labour and National Service. (b) Now separate department. (c) Exchange charged to votes concerned. (d) Includes Superannuation. (e) Included under Aircraft, equipment and stores.

EXPENDITURE FROM REVENUE, TRUST AND LOAN FUNDS: DEFENCE AND WAR (1939-42) SERVICES—*continued*.

Details.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
<b>Munitions—</b>	£	£	£	£	£
Administrative .. .. .	..	(a)	(a)	223,975	..
Munitions factories—Salaries, general expenses .. .. .	459,477	477,695	778,562	572,181	..
Technical training .. .. .	..	..	..	635,944	..
Munitions factories—					
Machinery, plant, etc. .. ..	327,670	314,021	1,043,758	4,863,778	..
Buildings, works, etc. .. ..	125,466	462,903	751,118	3,938,720	..
Armament Annexes—plant, material, etc. .. ..	2,402	340,677	413,708	1,812,756	..
Reserves of raw materials .. ..	..	43,728	624,888	2,502,116	..
Equipment for training tool-makers and tradesmen .. .. .	..	..	26,882	134,770	..
Miscellaneous .. .. .	..	..	653,644	173,274	..
Superannuation .. .. .	484	393	1,221	1,436	..
Interest and Sinking Fund .. ..	63,589	82,513	84,847	82,792	..
<b>Total .. .. .</b>	<b>979,088</b>	<b>1,721,930</b>	<b>4,408,628</b>	<b>14,941,742</b>	<b>..</b>
<b>Aircraft Production—</b>					
Salaries and general .. .. .	..	..	..	35,036	..
Engine factory—					
Materials and current expenses .. .. .	..	..	..	470,000	..
Construction and equipment .. .. .	..	..	356,427	526,820	..
Buildings, works, etc. .. .. .	..	..	127,379	75,090	..
Miscellaneous .. .. .	..	..	..	97,483	..
<b>Total .. .. .</b>	<b>..</b>	<b>..</b>	<b>483,806</b>	<b>1,204,429</b>	<b>..</b>
<b>Total, Navy, Army, Air, Munitions and Aircraft Production .. ..</b>	<b>9,745,593</b>	<b>14,298,131</b>	<b>54,490,274</b>	<b>158,670,569</b>	<b>295,621,274</b>
					(b)
<b>Supply and Shipping—</b>					
Administrative .. .. .	..	35,698	182,367	849,740	816,839
Flax production .. .. .	..	..	..	98,371	639,862
Construction of oil storage tanks .. .. .	..	..	..	23,129	301,756
Commonwealth Coal Board—handling and storage facilities and reserve stocks .. ..	..	..	..	60,500	136,278
Reserves of food, stores and materials .. ..	..	..	..	..	80,466
Power alcohol .. .. .	..	..	..	..	47,000
Assistance to essential industries and production .. .. .	..	..	..	..	214,711
Miscellaneous .. .. .	..	354	18,017	32,448	37,503
<b>Total .. .. .</b>	<b>..</b>	<b>36,052</b>	<b>200,384</b>	<b>1,064,191</b>	<b>2,274,415</b>
<b>Home Security—</b>					
Administrative .. .. .	..	..	..	..	41,504
Air raid precautions .. .. .	..	..	..	..	462,769
Bulk oil protection .. .. .	..	..	..	..	228,626
Other buildings, works, etc. .. ..	..	..	..	..	3,606
<b>Total .. .. .</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>736,505</b>
<b>Other Services—</b>					
Interest on loans for war purposes .. ..	..	..	393,362	1,895,529	5,212,989
Sinking fund on loans for war purposes .. ..	..	..	150,000	641,570	1,748,550
Exchange on interest remittances to London .. .. .	..	..	29,486	103,233	149,966
Peace Officers .. .. .	..	..	7,336	111,302	369,674
War pensions .. .. .	..	..	..	..	207,324
Other Departments .. .. .	..	..	206,939	1,047,752	3,924,301
Other Administrations (recoverable expenditure) .. .. .	..	..	..	6,959,665	9,502,295
<b>Total .. .. .</b>	<b>..</b>	<b>..</b>	<b>787,123</b>	<b>10,759,051</b>	<b>21,115,099</b>
<b>Total, Defence and War (1939-42) Services—</b>					
Consolidated Revenue Fund .. ..	6,371,719	9,410,482	21,883,751	65,680,917	109,233,539
Trust Fund(c) .. .. .	1,452,250	3,072,325	2,017,414	3,566,426	..
Loan Fund .. .. .	1,953,787	1,912,284	28,814,046	101,581,230	210,876,328
<b>Grand total .. .. .</b>	<b>9,780,756</b>	<b>14,395,091</b>	<b>55,715,211</b>	<b>170,828,573</b>	<b>320,109,867</b>

(a) Included under Supply and Shipping. (b) Details not available. (c) Includes expenditure from excess receipts of previous years appropriated for Defence Equipment Trust Account and from National Defence Contributions Trust Account.

**Division IV.—Payments to or for the States.**

1. **Introductory.**—In some previous issues of the Official Year Book particulars were given of the obligations imposed on the Commonwealth by the Constitution Act with reference to the payments to be made to the States, and the following statement briefly outlines the principal financial provisions of the Constitution in regard to the distribution of revenues received by the Commonwealth.

2. **Uniform Customs Duties.**—Prior to Federation, State revenues were largely derived from Customs and Excise duties and as the Commonwealth Constitution (Sections 86 and 90) transferred exclusively to the Commonwealth this source of revenue it was essential that the Constitution should provide adequate compensation for this loss to the States. Section 88 directed that uniform duties of customs must be imposed within two years after the establishment of the Commonwealth. This section was complied with on 8th October, 1901, by the introduction of the first Customs Tariff Bill.

3. **Special Western Australian Tariff.**—Section 95 of the Constitution authorized the Western Australian Government for a period of five years after the imposition of the uniform customs duties to impose customs duties on goods passing into that State and not originally imported from beyond the limits of the Commonwealth, such duties to be collected by the Commonwealth.

Provision was also contained in this section for the regulation of the rates of duty.

4. **Distribution of Commonwealth Revenue.**—Broadly, the requirements of the Commonwealth Constitution in regard to the financial relationship between the Commonwealth and the States may be divided into three phases covering definite periods.

(a) 1901 to 1910. This period was covered by Section 87 (known as the "Braddon Clause") which provided that:—

"During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, of the net revenue of the Commonwealth from duties of customs and of excise not more than one-fourth shall be applied annually by the Commonwealth towards its expenditure.

The balance shall, in accordance with this Constitution, be paid to the several States, or applied towards the payment of interest on the debts of the several States taken over by the Commonwealth".

The scheme outlined in the Constitution for determining the amount to be paid to the several States is contained in Sections 89 and 93, the former of which relates to the period prior to the imposition of uniform duties of customs (as provided in Section 88), the latter to the first five years after the imposition of such duties and thereafter until Parliament otherwise provides. The principle involved was that of crediting each State with the Commonwealth revenue collected in respect of that State, and of debiting it with the expenditure incurred on its behalf in connexion with transferred departments, as well as its share on a *per capita* basis of the "new" expenditure of the Commonwealth. On this account the method of allocation provided by the Constitution has become very generally known as the "book-keeping system". As the imposition of uniform duties of customs and excise throughout the Commonwealth took place on 9th October, 1901, the five years provided for in Section 93 expired on 8th October, 1906, and consequently the "book-keeping system" could then be changed at any time by the Commonwealth Parliament.

Section 93 provided that the duties of customs chargeable on goods imported into and duties of excise paid on goods produced or manufactured in one State and consumed in another should be credited to the consuming State. The balance in favour of any State was paid monthly by the Commonwealth.

The Surplus Revenue Act 1908 continued the "book-keeping system" but provided that any excess receipts over expenditure should be distributed monthly to each State in proportion to their respective populations. This act more clearly defined "transferred" and "new" expenditure.



(b) 1911 to 1927 (*Surplus Revenue Acts*). The provisions of Section 87 of the Constitution were terminated by the passing of the Surplus Revenue Act 1910 which provided for the following scheme of payments to operate from 1st July, 1910 :—

- (i) The Commonwealth to pay by monthly instalments or apply to the payment of interest on debts of the States taken over by the Commonwealth an annual sum amounting to twenty-five shillings per head of the number of people of the State ;
- (ii) In addition to the payments above all surplus revenue (if any) to be paid to the States in proportion to the number of people ; and
- (iii) A special payment to be made to Western Australia in monthly instalments of an annual sum of £250,000 in the first year, thereafter progressively diminishing by £10,000 each year. One half of the payments so made to be debited to all of the States (including Western Australia) on a population basis and the amount so debited to be deducted from the amount otherwise payable to each State.

After 1920 and until 1927 the provisions of the several Surplus Revenue Acts continued to govern the payments by the Commonwealth to the States.

(c) 1928 to date (*Financial Agreement Act*). An Amendment to the Constitution embodied in Section 105A gave effect to the powers conferred on the Commonwealth in Section 105. This amendment included provisions for :—

- (i) taking over the debts of the several States by the Commonwealth ;
- (ii) the payment by the Commonwealth of a fixed annual sum in respect of the interest on such debts and for certain sinking fund contributions ;
- (iii) the indemnification of the Commonwealth by the States in respect of debts taken over from the States ;
- (iv) the borrowing of money by the States or by the Commonwealth or by the Commonwealth for the States ; and
- (v) certain other matters connected with the management, consolidation, renewal, conversion and redemption of such debts.

5. **Special Grants.**—The Constitution provides in Section 96 for the granting of special financial assistance to the States. Reference has already been made to the special grant to Western Australia in the Surplus Revenue Act 1910. This State has continued to receive financial assistance each year since 1910–11. In 1912, a grant under similar conditions was made to Tasmania ; the amount payable in the first year, 1912–13, was £95,000, which was to be progressively reduced by £10,000 in each successive year. The Tasmania Grant Act 1913 provided for an addition to this grant, bringing the amount payable to £85,000 per annum to the year 1921–22 after which annual grants of varying magnitude were made.

South Australia received £360,000 in 1929–30 and further grants in each successive year.

Other direct grants to the States from consolidated revenue include contributions towards the payment of interest and sinking fund on loans expended by Local Government authorities on public works. Grants which have been made from loan fund are indicated in the statement of loan expenditure on page 568.

From the accumulated excess receipts since 1931–32, special assistance to the States was provided as follows :—

State.				1934–35.	1935–36.	1936–37.
				£	£	£
New South Wales	..	..	..	786,000	205,000	197,000
Victoria	..	..	..	550,000	140,000	137,000
Queensland	..	..	..	286,000	75,000	72,000
South Australia	..	..	..	176,000	45,000	44,000
Western Australia	..	..	..	133,000	35,000	33,000
Tasmania	..	..	..	69,000	..	17,000
Total	..	..	..	2,000,000	500,000	500,000

6. **Commonwealth Grants Commission.**—In 1933, the Commonwealth Government appointed the Commonwealth Grants Commission of three members to inquire into and report upon claims made by any State for a grant of financial assistance and any matters relevant thereto.

Applications were received from South Australia, Western Australia and Tasmania during each year from 1933 and the recommendations of the Commission in respect of the years 1938-39 to 1942-43 were as follows:—

State.	Grant Recommended.				
	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	£	£	£	£	£
South Australia .. ..	1,040,000	995,000	1,000,000	1,150,000	800,000
Western Australia .. ..	570,000	595,000	650,000	630,000	800,000
Tasmania .. ..	410,000	430,000	400,000	520,000	575,000
<b>Total</b> .. ..	<b>2,020,000</b>	<b>2,020,000</b>	<b>2,050,000</b>	<b>2,300,000</b>	<b>2,175,000</b>

During the year 1942-43 the Tasmanian Government lodged an application for additional financial assistance on the grounds that the original grant of £575,000 recommended was insufficient for the needs of the State. The claim was heard by the Commission and an advance payment of £200,000 was recommended. This, however, was not acceptable to the Tasmanian Government, which preferred to raise the money required through the Loan Council.

7. **States Grants (Income and Entertainments Tax Reimbursement) Acts.**—(i) *States Grants (Income Tax Reimbursement) Act.* As compensation to the States for vacating the income tax field to the Commonwealth Government, the latter will pay yearly, while the Act is in operation, the following amounts, less any arrears of tax collected during the year in question:—

	£				
New South Wales .. ..	..	..	..	..	15,356,000
Victoria .. ..	..	..	..	..	6,517,000
Queensland .. ..	..	..	..	..	5,821,000
South Australia .. ..	..	..	..	..	2,361,000
Western Australia .. ..	..	..	..	..	2,546,000
Tasmania .. ..	..	..	..	..	888,000
<b>Total</b> .. ..	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>33,489,000</b>

Amounts equal to the arrears collected will be repaid, with interest at a rate not less than 3 per cent., immediately prior to the expiration of the Act. The Treasurer of any State may inform the Commonwealth Grants Commission if he considers that the payments made under the Act are insufficient to meet his revenue requirements. The Commission, after inquiry into the matter, will then advise the Treasurer as to the justice of granting additional assistance. The Treasurer of Tasmania availed himself of this provision to apply for an increase of £200,000 in Income Tax Reimbursement for the year 1942-43. This increase was applied for in substitution of and not additional to the claim on which the advance of £200,000 referred to above was recommended. The Commission did not consider it just that any additional assistance should be granted.

The States Grants (Income Tax Reimbursement) Act came into operation on 1st July, 1942, and will continue until the end of the first financial year commencing after the cessation of the present war.

(ii) *States Grants (Entertainments Tax Reimbursement) Act.* The following amounts were paid to the States by the Commonwealth for that portion of the year 1942-43 following the withdrawal of the States from the entertainments tax field :—

					£
New South Wales	..	..	..	..	120,623
Victoria	..	..	..	..	279,944
South Australia	..	..	..	..	72,782
Western Australia	..	..	..	..	73,640
Tasmania	..	..	..	..	27,352
Total	..	..	..	..	574,341

Payments for subsequent years, while the Act is in operation, will be as follows :—

					£
New South Wales	..	..	..	..	160,830
Victoria	..	..	..	..	373,259
South Australia	..	..	..	..	97,043
Western Australia	..	..	..	..	98,186
Tasmania	..	..	..	..	36,469
Total	..	..	..	..	765,787

No compensation is payable in respect of Queensland because a State entertainment tax was not levied in that State.

The operation of this Act is for the same period as for the Income Tax Reimbursement Act.

**8. Grants for Road Construction.**—(i) *Main Roads Development Acts.* Grants amounting in the aggregate to £1,750,000 were made to the States in 1922-23, 1924-25 and 1925-26 for the purpose of reconditioning certain main roads. £1,500,000 of this amount was on the basis of the expenditure by the States of an equivalent amount.

(ii) *Federal Aid Roads.* The Federal Aid Roads Act 1926 made provision for the construction and re-construction of roads in the several States out of moneys provided by the Commonwealth and States respectively. The original arrangement provided for a grant by the Commonwealth of £2,000,000 per annum for ten years from 1st July, 1926. The allocation to the States was based on three-fifths according to population and two-fifths according to area.

Expenditure was made in the proportion of 15s. by the States to £1 by the Commonwealth. The original agreement was varied in certain respects, the most important of which operated from 1st July, 1931, when in lieu of the £2,000,000 per annum, the Commonwealth agreed to contribute an amount equivalent to 2½d. per gallon customs duty, and 1½d. per gallon excise duty on petrol entered for home consumption during each year, and the States were not required to make any contribution as formerly agreed upon.

The 1926 agreement, which was originally intended to remain in operation for ten years, was continued until 30th June, 1937, when a new agreement was entered into. The latter provided for the continuation of the Federal Aid Roads Agreement for a further period of ten years from 1st July, 1937, increased the amount payable to the States to 3d. a gallon customs duty and 2d. a gallon excise (except benzol, on which the excise is only 1½d.) on petroleum and shale products, and stipulated that the proceeds of the extra ½d. per gallon should be expended on the construction, reconstruction, maintenance or repair of roads, or other works connected with transport. The allocation of the amount payable was in the proportion of 5 per cent. to Tasmania and the remaining 95 per cent. to the other States on the basis of three-fifths according to the population at 30th June, 1936, and two-fifths according to area. At the request of the Commonwealth Government the States will, up to a limit of one-twelfth of this additional amount, attend to the maintenance or repair of roads of approach to or adjoining Commonwealth



properties. A further variation was the reduction from 3 to 2½ per cent. of the sinking fund contribution of the States on loan moneys provided by them between 1926 and 1931.

9. Amounts Paid.—(i) 1901 to 1942. The following table shows particulars of the amounts paid to each of the States since Federation, divided into three periods, with separate details for Special and Roads Grants. Special Commonwealth grants for the relief of primary producers are not included in this table. Details of these grants will be found in Chapter XXII. "Agricultural Production".

**PAYMENTS(a) BY THE COMMONWEALTH TO OR FOR THE STATES TO  
30th JUNE, 1942.**

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1900-01 to 1909-10 (b) ..	27,606	19,815	8,895	6,148	8,727	2,602	73,793
1910-11 to 1926-27 (c) ..	41,634	31,341	15,184	9,925	6,899	4,367	109,350
1927-28 to 1941-42 (d) ..	51,468	35,809	19,048	12,895	9,174	4,531	132,925
Special Grants (e) ..	..	..	..	14,295	10,970	7,506	32,771
Non-recurring Grants from Excess Receipts, 1934-35 to 1936-37 ..	1,188	827	433	265	201	86	3,000
Special Assistance (f) ..	.774	803	330	287	277	118	2,589
Grants for Road Construction, 1922-23 to 1941-42 (g) ..	12,364	7,911	8,414	5,013	8,536	2,223	44,461
<b>Total ..</b>	<b>135,034</b>	<b>96,506</b>	<b>52,304</b>	<b>48,828</b>	<b>44,784</b>	<b>21,433</b>	<b>398,889</b>

(a) Includes non-recurring grants from excess receipts, but excludes amounts provided for relief of wheat-growers and other primary producers and other payments for medical research, etc. (b) Under Section 87 of the Commonwealth Constitution. (c) Under the several Surplus Revenue Acts. (d) Under Financial Agreement Act 1928. (e) Under various State Grants Acts. (f) Unemployment Relief, Metalliferous Mining, Forestry, Local Public Works etc. (g) Under Federal Aid Roads and Main Roads Development Acts

(ii) 1941-42. For the year ended 30th June, 1942, the payments made to or for each State are given below:—

**PAYMENTS BY THE COMMONWEALTH TO OR FOR THE STATES, 1941-42.(a)**

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
Interest on States' Debts ..	2,917,411	2,127,159	1,096,235	703,816	473,432	266,859	7,584,912
Sinking Fund on States' Debts (b) ..	651,790	306,046	211,303	182,533	181,808	46,317	1,579,797
Special Grants ..	..	..	..	1,150,000	630,000	520,000	2,300,000
Federal Aid Roads and Works (c) ..	598,065	372,460	406,514	236,246	408,642	106,417	2,128,344
Local Public Works ..	39,400	27,400	14,450	8,700	6,650	3,400	100,000
Contributions—							
Interest on Loans for Drought Relief ..	16,500	8,100	1,500	4,500	7,500	..	38,100
Port Augusta—Port Pirie Railway Agreement ..	..	..	..	20,000	..	..	20,000
<b>Total ..</b>	<b>4,223,166</b>	<b>2,841,165</b>	<b>1,730,002</b>	<b>2,305,795</b>	<b>1,708,032</b>	<b>942,993</b>	<b>13,751,153</b>

(a) Excludes relief to primary producers and other payments for medical research, etc. (b) Paid to National Debt Sinking Fund. (c) Paid to Trust Fund.

### § 3. Trust Funds.

The Trust Fund balances on 30th June, 1942, amounted to £39,620,170, as compared with £33,477,484 on 30th June, 1941.

### § 4. Commonwealth Loan Funds and Public Debt.

1. General.—Although it was not until 1915 that the Commonwealth Government came into the loan market as a borrower, there had previously existed a Commonwealth Public Debt which included several items, such as the balance of the debt taken over from South Australia and the amount owing to the States for transferred properties. In view of the large expansion of the Public Debt, and its present importance in Commonwealth public finance, the different items are treated *seriatim* in the following paragraphs.

2. **Loans taken over from South Australia.**—The first portions of the debt were contracted at the beginning of 1911, when the Commonwealth assumed responsibility for the payment of interest on transferred properties (further dealt with in par. 4 below) and for the administration and the liabilities of the Northern Territory and the Port Augusta—Oodnadatta Railway. At 30th June, 1911, the debt on account of the former was £3,657,836, and on account of the latter, £2,274,486—a total of £5,932,322, and at 30th June, 1940, £27,216 and £6,019—a total of £33,235. During 1940–41 this remaining indebtedness was redeemed.

3. **Loan Fund for Public Works, etc.**—Up to the year 1911 the Commonwealth Government had met its public works expenditure out of revenue. In that year, however, in view of the heavy prospective cost of the Trans-Australian Railway and the Australian Capital Territory, a Loan Fund similar to those of the States was instituted. The initiation of this fund was greatly assisted by the fact that the Treasury at that time held a large quantity of gold, principally on behalf of the Australian Notes Account. Up to 30th June, 1914, the money required for loan expenditure was obtained mainly from this source at 3½ per cent., and inscribed stock of an equivalent value was created. Since then the money required for the Loan Fund has been mainly obtained by the issue of Treasury Bills and other securities issued in London and New York as well as in Australia. Yearly expenditure on works, etc., up to 1919–20 did not exceed £3,000,000. From 1920–21 it rose to nearly £9,500,000 in 1926–27 and it declined to about £2,000,000 in 1930–31. For the years 1931–32 to 1938–39 expenditure fluctuated between £520,000 and £4,550,000. During the last three years, due to the inclusion of expenditure on Defence and War (1939–42) Services the total expenditure from loan has risen considerably.

#### COMMONWEALTH EXPENDITURE FROM LOAN FUND.

Particulars.	1937–38.	1938–39.	1939–40.	1940–41.	1941–42.	Total to 30th June, 1942.
	£	£	£	£	£	£
Defence and War (1939–42) Services— General Services and Works ..	..	..	28,814,046	101,581,230	210,876,328	341,271,604
Additions, New Works, Buildings, etc.—						
Defence ..	1,953,787	1,912,284	..	..	..	8,693,948
Civil Aviation, Buildings and Works ..	112,550	..	..	..	..	214,291
Ships, Yards and Docks ..	..	Cr. 305,351	Cr. 14,016	Cr. 2,859	..	7,863,028
Lighthouses, Works and Services ..	Cr. 1,000	Cr. 1,000	Cr. 1,000	Cr. 1,000	Cr. 1,000	636,490
River Murray Waters Act ..	..	..	..	..	..	2,105,625
Postmaster-General's Department—						
Telegraph and Telephone Con- struction ..	..	..	1,733,113	1,689,329	939,918	36,057,558
Buildings Works, Sites, etc. ..	Cr. 451	Cr. 1,290	120,050	220,862	244,940	4,979,743
Subscription to Capital of Amalga- mated Wireless Ltd. ..	..	..	..	..	..	300,000
Radio Stations and Equipment ..	..	..	29,509	3,711	15,082	104,538
Serum and Health Laboratories ..	..	..	..	..	..	80,149
Other Health Buildings and Services ..	..	..	..	..	Cr. 1,100	21,864
Repatriation Buildings, etc. ..	..	..	..	..	..	47,026
War Service Homes (a) ..	..	..	..	..	..	7,329,523
Railways ..	Cr. 938	Cr. 339	Cr. 286	Cr. 2,240	Cr. 17,656	13,859,028
Territories (b) ..	Cr. 5,573	Cr. 6,768	Cr. 10,783	Cr. 4,321	Cr. 7,406	8,823,188
Immigration ..	..	..	..	..	..	1,680,834
Other ..	Cr. 263	..	..	..	..	1,381,094
Assistance to States—						
Unemployment Relief ..	Cr. 8,895	Cr. 3,822	Cr. 65,844	Cr. 45,284	Cr. 5,773	2,449,604
Mining ..	..	..	..	..	..	283,750
Forestry ..	..	..	..	..	..	322,000
Farmers' Debt Adjustment ..	2,500,000	2,000,000	750,000	500,000	165,000	7,732,000
Roads ..	..	..	..	..	..	249,686
Wire and Wire Netting ..	..	..	..	..	..	608,849
Drought Relief ..	..	..	..	1,270,000	597,000	1,867,000
Wheat Bounty ..	..	..	..	..	..	3,429,571
Total Additions, New Works, Buildings, etc. ..	4,549,215	3,593,714	2,540,743	3,628,218	1,929,005	110,220,387
GRAND TOTAL ..	4,549,215	3,593,714	31,354,789	105,209,448	212,805,333	451,491,991

(a) In addition, £13,045,408 was expended from War Loan Fund prior to 1923–24.  
Administration and other Public Buildings, Australian Capital Territory.

(b) Includes

4. **Properties Transferred from States.**—At the time of Federation, when the Commonwealth took over the control of several departments previously administered by the States, a large amount of property was handed over to the Commonwealth Government, which paid interest to the States at the rate of  $3\frac{1}{2}$  per cent. on the value of the properties so transferred. (Particulars of the valuation of the properties are given in Official Year Book No. 14, p. 694). The temporary provisions of the Financial Agreement between the Commonwealth Government and the Governments of the several States provided *inter alia* that the Commonwealth Government would for the period of two years from 1st July, 1927, pay to each State interest at the rate of 5 per cent. per annum on the agreed value of transferred properties as follows:—New South Wales, £4,788,005; Victoria, £2,302,862; Queensland, £1,560,639; South Australia, £1,035,631; Western Australia, £736,432; and Tasmania, £500,754; a total of £10,924,323.

From 1st July, 1929, the Commonwealth Government assumed all liability for so much of the Public Debt of the States maturing in London bearing interest at the rate of 5 per cent. per annum as is equivalent to the agreed value of the transferred properties shown above. The Commonwealth Government received the freehold or equivalent title to the transferred properties consisting of land or interests in land, and all liability of the Commonwealth to the State in respect of transferred properties was extinguished from that date.

5. **War (1914–19) Loan from the British Government.**—On the outbreak of the War of 1914–19, the Commonwealth Government obtained a loan from the British Government for the purpose of financing the prospective large military expenditure. At first, the arrangement was that the British Government should advance the sum of £18,000,000. Subsequently further loans amounting to £31,500,000 were negotiated. In addition to this capital indebtedness of £49,500,000, a further sum of £42,696,500 was due to the British Government for the maintenance of Australian troops.

Early in 1921 an arrangement was concluded with the British Government, by which almost the entire debt (upwards of £92,000,000) was consolidated. The Commonwealth Government undertook to extinguish the debt in about 35 years by annual payments representing 6 per cent. on the original debt, providing for interest at approximately £4 18s. 4d. per cent., and a sinking fund of approximately £1 1s. 8d. per cent. By a later arrangement with the British Government, however, principal and interest repayments for 1931–32 and subsequent years have been suspended. The principal outstanding on 30th June, 1941, was £79,724,220.

6. **Flotation of War (1914–19) Loans in Australia.**—In addition to the advances from the British Government, the Commonwealth Government raised large amounts of money in Australia. Full details of the seven War Loans are given in Official Year Book No. 14.

7. **Flotation of War (1939–43) Loans.**—The amounts liable in respect of portions of several loans raised, prior to the outbreak of the present war, for defence purposes, have now been reclassified as War (1939–43) Debt. These liabilities amounted to £12,396,016 at 30th June, 1940. The following table shows particulars of loans floated since the outbreak of war.



## WAR (1939-43) LOAN RAISINGS.

Period of Loan.	Amount Invited.	Number of Subscribers.	Amount Subscribed.	Rate of Interest.	Year of Maturity.	Price.	Allocation of Proceeds—	
							Commonwealth—Defence, War, etc.	States—Works, etc.
	£'000.		£'000.	%			£'000.	£'000.
1.12.39	12,000	Banks	12,000	3½	{ (a)1942 (a)1943 (a)1944	100	3,340	8,660
1.3.40 to 15.3.40	18,000	14,339	8,958	3½	1950-56 1945	100	9,086	9,079
29.5.40 to 14.6.40			9,207 6,747	3½ 2½				
28.11.40 to 14.12.40	20,000	32,792	13,835 7,692	3½ 2½	1950-56 1945	100	20,582	..
30.4.41 to 19.5.41			20,813 13,642	3½ 2½				
7.10.41 to 15.11.41	100,000b	154,148	22,229 5,386 5,342c	3½ 2½	1950-56 1945-46	100	{ 34,158 22,730c	.. 43,247c
17.2.42 to 10.3.42			28,772 60,635c 12,869	3½ 2½				
2.6.42 to 23.6.42	35,000	244,595	35,463 7,933	3½ 2½	1950-58 1946-47	100	48,332	..
3.11.42 to 15.12.42			30,342 22,103 651c	3½ 2½	1950-58 1946-47	100	{ 82,686 933c	.. 20,844c
16.3.43 to 20.4.43	100,000	433,365	60,583 21,126c 18,673	3½ 2½				
Total..	483,000	1,616,764	507,250	..	..	..	412,342	94,908

(a) £4,000,000 each year.

(b) Includes £70,000,000 conversion.

(c) Conversion.

(d) Includes £22,700,000 conversion.

Totals include particulars of conversions as follows :—Amount Invited, £92,700,000 ; Amount Subscribed, £87,754,000 ; Commonwealth proceeds, £23,663,000 ; State proceeds, £64,091,000.

In addition to the above amounts, at 30th June, 1943, over £35,146,000 had been raised by War Savings Certificates (Seven Years' Series), over £6,349,000 by Citizens' National Emergency (Interest Free) Loans, and £1,584,000 by National Savings Bonds.

An advance of £12,000,000, now redeemed, was made by the British Government for war purposes.

8. London Conversion Loans.—Loans aggregating £22,000,000 were due for redemption in London in 1932-33, and in addition the Government had optional rights of redemption over a further £88,000,000, all of which were carrying an interest burden of 5 per cent. or greater. These obligations, particularly the accumulation of loans with optional rights of redemption, presented some difficulty to the Government and led to the appointment of a Resident Minister in London, who, in conjunction with the Australian Loan Council, arranged for the conversion of Commonwealth and State securities amounting to £109,849,000 between October, 1932, and February, 1934. Particulars of these and subsequent conversions to June, 1941, are shown in the table on pages 820 and 821 of Official Year Book No. 34 and in previous issues. Particulars of the total amounts converted and the total savings on account of interest and exchange are also shown. In July, 1941, Commonwealth Stock to the value of £30,011,400 on account of the Commonwealth, Victoria and Queensland was converted, the new price of issue being 99, the rate of interest 3½ per cent. and the date of maturity 1961-66. The rates of interest on the original loan were 4½ per cent. (£11,902,600) and 5 per cent. (£18,108,800).

9. **Other Loan Raisings, 1941-42.**—In addition to those loans, particulars of which are shown on page 570, there was a special issue of £3,019,000 for public works of the Commonwealth and States and other purposes. The price of issue was par, the rate of interest  $2\frac{1}{2}$  per cent. and the date of maturity 1946-47. "Over the Counter" Sales amounted to £1,879,060.

10. **Public Debt for Commonwealth Purposes.**—(i) *Total Debt.* Reference has already been made to the development of the Commonwealth Public Debt and the following table shows the debt of the Commonwealth (excluding that of the States) at 30th June, 1942 :—

## PUBLIC DEBT FOR COMMONWEALTH PURPOSES AT 30th JUNE, 1942.

Particulars.	Maturing in—			Total. (a)
	London.	New York.	Australia.	
	£ Stg.	£ (b)	£ Aust.	£
War (1914-19) Debt—				
Stock and Bonds				
Indebtedness to United Kingdom Government	11,020,160	..	167,056,425	178,076,585
War and Peace Savings Certificates and Stamps, War Gratuity Bonds .. ..	79,724,220	..	..	79,724,220
	..	..	163,189	163,189
Total .. .. .	90,744,380	..	167,219,614	257,963,994
War (1939-42) Debt—				
Stock and Bonds				
Advance Loan Subscriptions	5,775,000	..	202,247,157	208,022,157
Citizens' National Emergency Loans	..	..	3,361,470	3,361,470
National Savings Bonds .. ..	100,000	..	5,929,192	6,029,192
War Savings Certificates	..	..	658,840	658,840
War Savings Stamps	..	..	26,170,601	26,170,601
Treasury Bills, Internal	..	..	200,615	200,615
Treasury Bills, Public	..	..	2,296,000	2,296,000
Indebtedness to United Kingdom Government	..	..	80,481,000	80,481,000
	12,000,000	..	..	12,000,000
Total .. .. .	17,875,000	..	321,344,875	339,219,875
Works and other Purposes—				
Stock and Bonds				
Treasury Bills and Debentures	61,663,936	15,876,718	29,263,917	106,804,571
Treasury Bills, Internal	3,470,160	..	3,470,160	3,470,160
	..	..	10,692,248	10,692,248
Total, Works and other Purposes ..	65,134,096	15,876,718	39,956,165	120,966,979
Total, Commonwealth Purposes ..	173,753,476	15,876,718	528,520,654	718,150,848

## PER HEAD OF POPULATION.(c)

	(Stg.) £ s. d.	(b) £ s. d.	(Aust.) £ s. d.	£ s. d.
War (1914-19) Debt .. .. .	12 13 0	..	23 6 2	35 19 2
War (1939-42) Debt .. .. .	2 9 10	..	44 15 10	47 5 8
Works and other Purposes .. ..	9 1 7	2 4 3	5 11 5	16 17 3
Total Commonwealth Purposes ..	24 4 5	2 4 3	73 13 5	100 2 1

(a) The total "face" or "book" value of the public debt without adjustment on account of currency changes since the loans were floated. (b) Payable in terms of dollars. For the purposes of these tables dollars have been arbitrarily converted to £ Stg. at the rate of \$4.8665 to £1.  
(c) Based on population at 30th June, 1942.

(ii) *Place of Flotation.* Since 1931-32 few new loans have been raised overseas. None have been raised in New York since 1927-28. Those raised in London have been

almost exclusively conversion loans, particulars of which are given on page 570 of this issue and in previous issues. A total of £8,000,000 has been raised since 1937 for defence purposes.

**PUBLIC DEBT FOR COMMONWEALTH PURPOSES: PLACE OF FLOTATION, AT 30th JUNE.**

Place of Flotation, etc.	1938.	1939.	1940.	1941.	1942.
War (1914-19) Debt— London .. .. £ Stg.	90,744,381	90,744,381	90,744,381	90,744,380	90,744,380
Total Overseas .. .. £ Stg.	90,744,381	90,744,381	90,744,381	90,744,380	90,744,380
Australia .. .. £ Aust.	179,058,853	175,193,890	173,028,896	171,240,024	167,219,614
Total War (1914-19) Debt £ a	269,803,234	265,938,271	263,773,277	261,984,404	257,963,994
War (1939-42) Debt— London .. .. £ Stg.	..	..	5,810,000	17,875,000	17,875,000
Total Overseas .. .. £ Stg.	..	..	5,810,000	17,875,000	17,875,000
Australia .. .. £ Aust.	..	..	46,808,759	109,649,579	321,344,875
Total War (1939-42) Debt £ a	..	..	52,618,759	127,524,579	339,219,875
Works and other Purposes— London .. .. £ Stg.	67,619,246	72,096,566	65,779,396	65,384,097	65,134,096
New York .. .. £ (b)	16,080,972	15,913,501	15,876,718	15,876,718	15,876,718
Total Overseas .. .. £ (a)	83,700,218	88,010,067	81,656,114	81,260,815	81,010,814
Australia .. .. £ Aust.	37,341,609	43,302,593	37,279,030	39,458,596	39,956,165
Total Debt for Works, etc. £ a	121,041,827	131,312,660	118,935,144	120,719,411	120,966,979
Total Debt— London .. .. £ Stg.	158,363,627	162,840,947	162,333,777	174,003,477	173,753,476
New York .. .. £ (b)	16,080,972	15,913,501	15,876,718	15,876,718	15,876,718
Total Overseas .. .. £ (a)	174,444,599	178,754,448	178,210,495	189,880,195	189,630,194
Australia .. .. £ Aust.	216,400,462	218,496,483	257,116,685	320,348,199	528,520,654
Grand Total .. .. £ (a)	390,845,061	397,250,931	435,327,180	510,228,394	718,150,848

(a) The figures given represent the total "face" or "book" value of the public debt without any adjustment on account of currency changes since the loans were floated. (b) Payable in terms of dollars. For the purposes of these tables dollars have been arbitrarily converted to £ Stg. at the rate of \$4.8665 to £1.

(iii) *Amount of Debt at Various Rates of Interest.*—The first debt taken over from South Australia consisted mainly of securities bearing interest varying from 3 per cent. to 4 per cent., the average rate of interest for the first year being £3 12s. 4d. For the first three years the increase in the debt was due almost entirely to the expansion of the 3½ per cent. stock of the Loan Fund, consequently the average rate of interest fell until on 30th June, 1914, it stood at £3 11s. 10d. With the loans raised for war and repatriation purposes interest rates rose until the National Debt Conversion Loan (July–August, 1931) reduced interest rates on internal loans by 2½ per cent. Conversion loans in London referred to on p. 570 have reduced the average rate of interest on debt maturing in London by more than one per cent. from £4 18s. 11d. per cent. in 1931 to



£3 17s. 10d. in 1942. The average rate of interest on internal loans at 30th June, 1942 was £3 18s. 9d. per cent. as compared with £5 9s. 10d. per cent. at 30th June, 1931. The average rate of interest payable on the total debt decreased from £5 48s. 11d. per cent. in 1931 to £3 5s. 1d. per cent. at 30th June, 1942.

The accompanying table gives particulars of rates of interest on the debt for Commonwealth purposes at 30th June, 1942 :—

**PUBLIC DEBT FOR COMMONWEALTH PURPOSES : AMOUNTS AT EACH RATE OF INTEREST, AT 30th JUNE, 1942.**

Rates of Interest.				Debt Maturing in—			
				London.	New York.	Australia.	Total.
Per cent.				£ (Stg.)	£ (a)	£ (Aust.)	£ (b)
5.0	..	..	..	29,128,495	12,295,662	(c) 4,738	41,428,895
4.91667	..	..	..	(d) 79,724,220	..	..	79,724,220
4.5	..	..	..	..	3,581,056	..	3,581,056
4.2625	..	..	..	..	..	127,119	127,119
4.25	..	..	..	..	..	80,719	80,719
4.06875	..	..	..	..	..	2,558,430	2,558,430
4.0	..	..	..	5,775,000	..	108,997,041	114,772,041
3.875	..	..	..	..	..	46,003,570	46,003,570
3.75	..	..	..	20,730,800	..	7,606,880	28,337,680
3.675	..	..	..	..	..	66,510	66,510
3.625	..	..	..	..	..	4,284,580	4,284,580
3.5	..	..	..	5,989,400	..	4,375,450	10,364,850
3.375	..	..	..	..	..	4,334,850	4,334,850
3.25	..	..	..	16,563,595	..	e 189,600,491	206,164,086
3.0	..	..	..	12,000,000	..	5,916,640	17,916,640
2.75	..	..	..	271,806	..	11,737,570	12,009,376
2.5	..	..	..	..	..	42,903,700	42,903,700
2.25	..	..	..	2,470,160	..	..	2,470,160
2.0	..	..	..	1,000,000	..	..	1,000,000
1.5	..	..	..	..	..	93,469,248	93,469,248
Citizens' National Emergency Loans (Interest Free)				100,000	..	5,929,192	6,029,192
Overdue				..	..	(f) 309,116	309,116
War (1939-42) Savings Stamps				..	..	200,615	200,615
War (1914-19) Savings Stamps				..	..	14,195	14,195
Total	..	..	..	173,753,476	15,876,718	528,520,654	718,150,848
Average rate per cent.				£ s. d.	£ s. d.	£ s. d.	£ s. d.
				3 17 10	4 17 9	3 1 9	3 5 1

(a) Payable in terms of dollars. For the purposes of these tables dollars have been arbitrarily converted to £ Stg. at the rate of \$4.8665 to £1. (b) The total "face" or "book" value of the public debt without adjustment on account of currency changes since the loans were floated. (c) War (1914-19) Savings Certificates. (d) War Debt due to Government of the United Kingdom (see par. 5, page 569). (e) Includes War (1939-42) Savings Certificates, £26,170,601. (f) Includes War Gratuity Bonds, £11,977.

(iv) *Amount of Interest Payable.* The next table shows the interest payable in Australia and overseas on the Commonwealth Public Debt (excluding amounts raised on behalf of the several States and debts of the States taken over) at 30th June in the years 1938 to 1942 inclusive :—

**PUBLIC DEBT FOR COMMONWEALTH PURPOSES : INTEREST PAYABLE AT 30TH JUNE.**

Interest on and where payable.	1938.	1939.	1940.	1941.	1942.
<b>War (1914-19) Debt—</b>					
London .. .. £ Stg.(a)	426,008	426,008	426,008	426,008	426,008
Australia .. .. £ Aust.	7,149,993	6,949,706	6,868,976	6,798,034	6,433,774
<b>Total War (1914-19) Debt £ (b)</b>	<b>7,576,001</b>	<b>7,375,714</b>	<b>7,294,984</b>	<b>7,224,042</b>	<b>6,859,782</b>
<b>Average Rate .. .. %</b>	<b>£3 19s. 9d.</b>	<b>£3 19s. 3d.</b>	<b>£3 19s. 3d.</b>	<b>£3 19s. 3d.</b>	<b>£3 17s. 0d.</b>
<b>War (1939-42) Debt—</b>					
London .. .. £ Stg.	..	..	232,400	591,000	591,000
Australia .. .. £ Aust.	..	..	1,416,569	3,255,101	8,506,827
<b>Total War (1939-42) Debt.. £</b>	<b>..</b>	<b>..</b>	<b>1,648,969</b>	<b>3,846,101</b>	<b>9,097,827</b>
<b>Average Rate .. .. %</b>	<b>..</b>	<b>..</b>	<b>£3 7s. 8d.</b>	<b>£3 3s. 0d.</b>	<b>£2 14s. 7d.</b>
<b>Works and other Purposes—</b>					
London .. .. £ Stg.	2,775,291	2,977,546	2,729,388	2,719,314	2,638,822
New York .. .. £ (c)	785,240	777,586	775,930	775,930	775,930
<b>Total Overseas .. .. £ (b)</b>	<b>3,560,531</b>	<b>3,755,132</b>	<b>3,505,318</b>	<b>3,495,244</b>	<b>3,414,752</b>
<b>Australia .. .. £ Aust.</b>	<b>1,151,759</b>	<b>1,394,921</b>	<b>1,135,095</b>	<b>1,195,661</b>	<b>1,194,439</b>
<b>Total Debt for Works, etc. .. £ (b)</b>	<b>4,712,290</b>	<b>5,150,053</b>	<b>4,640,413</b>	<b>4,690,905</b>	<b>4,609,191</b>
<b>Average Rate .. .. %</b>	<b>£3 17s. 10d.</b>	<b>£3 18s. 5d.</b>	<b>£3 18s. 0d.</b>	<b>£3 17s. 9d.</b>	<b>£3 16s. 2d.</b>
<b>Total Debt—</b>					
London .. .. £ Stg.(a)	3,201,299	3,403,554	3,387,796	3,736,322	3,655,830
New York .. .. £ (c)	785,240	777,586	775,930	775,930	775,930
<b>Total Overseas .. .. £ (b)</b>	<b>3,986,539</b>	<b>4,181,140</b>	<b>4,163,726</b>	<b>4,512,252</b>	<b>4,431,760</b>
<b>Australia .. .. £ Aust.</b>	<b>8,301,752</b>	<b>8,344,627</b>	<b>9,420,640</b>	<b>11,248,796</b>	<b>16,135,040</b>
<b>Grand Total .. .. £ (b)</b>	<b>12,288,291</b>	<b>12,525,767</b>	<b>13,584,366</b>	<b>15,761,048</b>	<b>20,566,800</b>
<b>Average Rate .. .. %</b>	<b>£3 19s. 0d.</b>	<b>£3 18s. 11d.</b>	<b>£3 17s. 3d.</b>	<b>£3 14s. 2d.</b>	<b>£3 5s. 1d.</b>

(a) Excludes suspended interest on War Debt owing to British Government. (b) The totals shown represent the nominal amount of interest, taking no account of exchange. (c) Payable in terms of dollars. For the purposes of these tables dollars have been arbitrarily converted to £ Stg. at the rate of \$4.8665 to £1.

(v) *Dates of Maturity.* The dates of maturity of the several portions of the Commonwealth debt are shown below according to financial years. Prior to 1937-38 the Public Debt was shown classified according to the latest date of maturity only, but the particulars now include tables showing both the earliest and latest dates of maturity. The Commonwealth Government has refrained from issuing interminable stock, but, in respect of a small proportion of the debt, no definite date of maturity had been assigned on 30th June, 1942.

## PUBLIC DEBT FOR COMMONWEALTH PURPOSES, AT 30th JUNE, 1942.

(CLASSIFIED ACCORDING TO LATEST DATE OF MATURITY.)

Due Dates (year ended 30th June).				Maturing in—			Total. ● £
				London. £ (Stg.)	New York. £ (Stg.)	Australia. £ (Aust.)	
1943	..	..	..	3,741,966	..	98,343,818	102,085,784
1944	..	..	..	..	..	2,149,450	2,149,450
1945	..	..	..	..	..	24,682,122	24,682,122
1946	..	..	..	..	..	16,072,420	16,072,420
1947	..	..	..	..	..	31,198,580	31,198,580
1948	..	..	..	..	..	29,880,497	29,880,497
1949	..	..	..	..	..	4,366,470	4,366,470
1950	..	..	..	..	..	2,880	2,880
1951	..	..	..	..	..	13,346,141	13,346,141
1952	..	..	..	..	..	14,304,970	14,304,970
1953	..	..	..	..	..	658,840	658,840
1954	..	..	..	13,780,100	..	..	13,780,100
1955	..	..	..	..	..	40,573,179	40,573,179
1956	..	..	..	..	13,548,199	14,166,248	27,714,447
1957	..	..	..	6,950,700	..	51,907,060	58,857,760
1958	..	..	..	..	2,328,519	61,935,866	64,264,385
1959	..	..	..	..	..	65,724,750	65,724,750
1960	..	..	..	12,000,000	..	11,843,182	23,843,182
1961	..	..	..	16,233,817	..	..	16,233,817
1962	..	..	..	..	..	11,034,135	11,034,135
1964	..	..	..	5,775,000	..	..	5,775,000
1967	..	..	..	5,989,400	..	..	5,989,400
1975	..	..	..	329,778	..	..	329,778
1976	..	..	..	29,128,495	..	..	29,128,495
War (1939-42) Savings Certificates	..	..	..	..	..	26,170,601	26,170,601
War (1939-42) Savings Stamps	..	..	..	..	..	200,615	200,615
Citizens' National Emergency Loans	..	..	..	100,000	..	5,929,192	6,029,192
Advance Loan Subscriptions	..	..	..	..	..	3,361,470	3,361,470
War (1914-19) Savings Certificates	..	..	..	..	..	4,738	4,738
Peace Savings Certificates	..	..	..	..	..	132,280	132,280
War (1914-19) Savings Stamps	..	..	..	..	..	14,195	14,195
Overdue	..	..	..	..	..	(a) 309,116	309,116
Annual repayments	..	..	..	(b) 79,724,220	..	..	79,724,220
Half-yearly	..	..	..	..	..	207,839	207,839
Total	..	..	..	173,753,476	15,876,718	528,520,654	718,150,848

(a) Includes War Gratuity Bonds, £11,977.  
British Government.

(b) Repayments suspended by arrangement with



## PUBLIC DEBT FOR COMMONWEALTH PURPOSES, AT 30th JUNE, 1942.

(CLASSIFIED ACCORDING TO EARLIEST DATE OF MATURITY.)

Due Dates (year ended 30th June).				Maturing in—			Total.
				London.	New York.	Australia.	
				£ (Stg.)	£ (Stg.)	£ (Aust.)	£
Before 1943	..	..	..	271,806	..	..	271,806
1943	..	..	..	3,470,160	..	98,343,818	101,813,978
1944	..	..	..	..	..	2,149,450	2,149,450
1945	..	..	..	..	..	24,682,122	24,682,122
1946	..	..	..	29,128,495	..	36,026,710	65,155,205
1947	..	..	..	..	..	19,643,410	19,643,410
1948	..	..	..	..	2,328,519	21,481,377	23,809,896
1949	..	..	..	13,780,100	..	4,366,470	18,146,570
1950	..	..	..	..	..	2,880	2,880
1951	..	..	..	..	..	180,980,231	180,980,231
1952	..	..	..	..	..	14,304,970	14,304,970
1953	..	..	..	6,950,700	9,967,143	41,232,019	58,149,862
1954	..	..	..	..	..	1,717,780	1,717,780
1956	..	..	..	28,233,817	3,581,056	12,448,468	44,263,341
1958	..	..	..	..	..	11,933,586	11,933,586
1960	..	..	..	..	..	11,843,182	11,843,182
1961	..	..	..	5,775,000	..	..	5,775,000
1962	..	..	..	5,989,400	..	11,034,135	17,023,535
1965	..	..	..	329,778	..	..	329,778
War (1939-42) Savings Certificates	..	..	..	..	..	26,170,601	26,170,601
War (1939-42) Savings Stamps	..	..	..	..	..	200,615	200,615
Citizens' National Emergency Loans	..	..	..	100,000	..	5,929,192	6,029,192
Advance Loan Subscriptions	..	..	..	..	..	3,361,470	3,361,470
War (1914-19) Savings Certificates	..	..	..	..	..	4,738	4,738
Peace Savings Certificates	..	..	..	..	..	132,280	132,280
War (1914-19) Savings Stamps	..	..	..	..	..	14,195	14,195
Overdue	..	..	..	..	..	(a) 309,116	309,116
Annual repayments	..	..	..	(b) 79,724,220	..	..	79,724,220
Half-yearly	..	..	..	..	..	207,839	207,839
Total	..	..	..	173,753,476	15,876,718	528,520,654	718,150,848

(a) Includes War Gratuity Bonds, £11,977.  
British Government.

(b) Repayments suspended by arrangement with

11. **Sinking Funds.**—Particulars relating to the creation of sinking funds are included in previous issues.

The old sinking funds were merged in the National Debt Sinking Fund on 11th August, 1923. Particulars of receipts and expenditure of the Commonwealth Account from the year 1937-38 are as follows :—

**PUBLIC DEBT FOR COMMONWEALTH PURPOSES : SINKING FUND.**

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.	Total 1923-24 to 1941-42.
	£	£	£	£	£	£
<b>Cr. Brought forward ..</b>	1,937,295	1,252,784	1,131,163	1,525,784	3,431,212	..
Balance transferred to Fund on 11th August, 1923 ..	..	..	..	..	..	2,262,983
From Consolidated Revenue	3,681,741	3,917,825	4,269,096	4,956,791	6,547,177	58,861,155
Repayments of Sundry Loans ..	15,610	16,510	21,385	22,630	160	1,331,712
Purchase-money and Re- payments under War Service Homes Act ..	607,435	628,950	636,102	650,300	676,036	11,882,037
Half Net Profit Common- wealth Bank ..	318,752	321,448	363,719	422,930	188,070	5,873,396
Reparation Moneys ..	147	148	126	15	..	5,574,245
Interest on Investments ..	40,478	32,381	25,183	30,332	42,218	893,073
Other Contributions ..	13,453	13,453	13,453	13,453	12,177	207,069
<b>Total .. ..</b>	<b>6,614,911</b>	<b>6,183,499</b>	<b>6,460,227</b>	<b>7,622,235</b>	<b>10,897,050</b>	<b>86,885,670</b>
<b>Dr. Redemptions .. ..</b>	<b>5,362,127</b>	<b>5,052,336</b>	<b>4,934,443</b>	<b>4,191,023</b>	<b>7,033,041</b>	<b>83,021,661</b>
<b>Carried forward .. ..</b>	<b>1,252,784</b>	<b>1,131,163</b>	<b>1,525,784</b>	<b>3,431,212</b>	<b>3,864,009</b>	<b>3,864,009</b>

Particulars of repayment of the British Government loan are given on page 569.

Information regarding the transactions of the States' Account of the National Debt Sinking Fund is published in the State Finance section of this issue, and, in greater detail, in the *Finance Bulletin* issued by this Bureau.

## § 5. Cost of War (1914-1919) and Repatriation.

In view of the importance of the subject, a further reference is here made to the cost of the War of 1914-19. The general policy of the Commonwealth Government has been to pay from Consolidated Revenue all charges for interest, sinking fund, pensions and other recurring charges consequent upon the War, and part of the expense of repatriation. On the other hand, the whole direct cost of the War and the larger proportion of the cost of repatriation have been paid from loans. Detailed particulars

relating to Repatriation, War and Service Pensions appear in Chapter X. "Repatriation" of this issue. The total cost from both sources to 30th June, 1942, is set out in the following table:—

## COMMONWEALTH WAR (1914-19) EXPENDITURE.

Period.	From Consolidated Revenue Fund.			War Loan Expenditure.(b)
	War and Re- patriation Ser- vices, including War Pensions.	Interest and Sinking Fund. (a)	Total.	
	£	£	£	£
1914-15 to 1918-19 ..	15,541,230	30,694,164	46,235,394	219,213,065
1919-20 to 1923-24 ..	50,370,399	94,506,889	144,877,288	77,374,183
1924-25 to 1928-29 ..	43,334,160	93,147,404	136,481,564	Cr. 52,439
1929-30 to 1933-34 ..	44,871,115	66,831,833	111,702,948	Cr. 4,875
1934-35 to 1938-39 ..	45,237,608	47,833,890	93,071,498	..
1939-40 .. ..	9,342,577	9,491,965	18,834,542	..
1940-41 .. ..	9,142,053	9,460,577	18,602,630	..
1941-42 .. ..	9,044,425	9,573,877	18,618,302	..
Discounts and Flotation Ex- penses on Loans, including Redemption and Conversion Loans .. ..	(c)	..	..	5,999,094
Indebtedness to the Govern- ment of the United Kingdom for payments made, services rendered, and goods supplied during the War .. ..	..	..	..	(d)43,398,098
War Gratuities paid in cash ..	452,295	..	452,295	27,062,627
Total to 30th June, 1942..	227,335,862	2361,540,599	588,876,461	372,989,753

NOTE.—For particulars of expenditure relating to the present War see pages 560-562 and 568.

(a) Excludes interest on amounts raised for the States for Soldier Land Settlement. (b) Excludes expenditure on War Service Homes from 1923-24. (See page 568.) (c) Included above. (d) The total indebtedness to the Government of the United Kingdom involved in the Funding Arrangements Act 1921 was £92,480,157, the balance, £49,082,059, for cash supplied, being included above. At 30th June, 1942, the amount outstanding had been reduced to £79,724,220. (e) Interest, £307,326,593; Sinking Fund, £54,214,006.



## § 6. Invalid and Old-age Pensions.

1. General.—In previous issues of the Official Year Book an account is given of the introduction of the old-age pension system in Australia, together with a detailed description of the Commonwealth Invalid and Old-age Pensions Act 1908, which became operative on 1st July, 1909. Invalid pensions were first paid from 15th December, 1910. The following statement shows the rates of pension under the original Act and the rates as they have been varied from time to time :—

## RATES OF PENSION PAYABLE.

Date from which Operative.	Pension Payable—		Pensioner's Maximum Income including pension.	
	Annual Rate.	Weekly Equivalent.	Annual Rate.	Weekly Equivalent.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1st July, 1909 .. ..	26 0 0	0 10 0	52 0 0	1 0 0
12th October, 1916 .. ..	32 10 0	0 12 6	58 10 0	1 2 6
1st January, 1920 .. ..	39 0 0	0 15 0	65 0 0	1 5 0
13th September, 1923 .. ..	45 10 0	0 17 6	78 0 0	1 10 0
8th October, 1925 .. ..	52 0 0	1 0 0	84 10 0	1 12 6
23rd July, 1931 .. ..	45 10 0	0 17 6	78 0 0	1 10 0
13th October, 1932 .. ..	45 10 0	0 17 6	71 10 0	1 7 6
26th October, 1933 .. ..	45 10 0	0 17 6	78 0 0	1 10 0
4th July, 1935 .. ..	46 16 0	0 18 0	79 6 0	1 10 6
24th September, 1936 .. ..	49 8 0	0 19 0	81 18 0	1 11 6
9th September, 1937 .. ..	52 0 0	1 0 0	84 10 0	1 12 6
26th December, 1940 .. ..	54 12 0	1 1 0	87 2 0	1 13 6
3rd April, 1941 .. ..	55 18 0	1 1 6	88 8 0	1 14 0
11th December, 1941 .. ..	61 2 0	1 3 6	93 12 0	1 16 0
2nd April, 1942 .. ..	65 0 0	1 5 0	97 10 0	1 17 6
1st October, 1942 .. ..	66 6 0	1 5 6	98 16 0	1 18 0
7th January, 1943 .. ..	67 12 0	1 6 0	100 2 0	1 18 6
1st April, 1943 .. ..	68 18 0	1 6 6	101 8 0	1 19 0
19th August, 1943 .. ..	70 4 0	1 7 0	102 14 0	1 19 6

Subject to the conditions of the Act, every person, who is not receiving an invalid pension, and who has attained the age of sixty-five years (in the case of females, sixty years), is, while in Australia, qualified to receive an old-age pension.

Asiatics and aboriginal natives of Australia, Africa, the Islands of the Pacific or New Zealand generally, are not eligible to receive an invalid or old-age pension, but the Act was amended in November, 1941, to include those Asiatics who are British subjects, and in May, 1942, to include, under certain conditions, aboriginal natives of Australia, and of the Pacific Islands.

Invalid pensions were granted from 15th December, 1910. Subject to the conditions of the Act, every person above the age of sixteen years who is permanently incapacitated for work, and every permanently blind person above the age of sixteen years, provided that, in each case, an old-age pension is not being received, is, while in Australia, qualified to receive an invalid pension. A claimant for an invalid pension, or an invalid pensioner, may be required to undertake such training for a vocation or physical rehabilitation as is available. In 1920 special provision was made for a permanently blind person, by which the annual pension was at such a rate (not exceeding that shown in the table above), as would make his income plus that of his wife together with the pension equal to an amount not exceeding £221 per annum. This amount has since been varied to £230 2s. from 26th December, 1940, £231 8s. from 3rd April, 1941, £236 12s. from 11th December, 1941, and £237 18s. from 2nd April, 1942. Under the May, 1942, amendment (see next page) blind pensioners are permitted to have an additional income equal to the Federal basic wage, thereby raising the limit to £299 per annum (Federal basic wage,

£4 10s. per week and pension £1 5s. per week). An amendment to the Act, assented to on 29th March, 1943, provided for the payment of an allowance not exceeding £39 per annum to wives of invalid pensioners, provided that they themselves are not invalid or old-age pensioners. This allowance is subject to the deduction of the amount by which the other income of the wife exceeds £32 10s. per annum (12s. 6d. per week) and of £1 for every complete £10 by which the net capital value of the accumulated property of the wife exceeds £50. Provision has also been made for the payment of an additional allowance of £13 per annum (5s. per week) where there are children under sixteen years of age. The same amendment provides for the payment of an amount not to exceed £10 towards the funeral costs of invalid and old-age pensioners.

In December, 1940, when the pension rate was increased to £54 12s. per annum, provision was made for future adjustments to be made in accordance with the variations of the "C" Series Retail Prices Index-number for the Six Capital Cities, and for the rate to be reviewed by the Commissioner of Pensions each quarter commencing with that ended 31st March, 1941, in order to determine the rate for the next succeeding quarter; but the rate not in any event to fall below £54 12s. per annum. The first adjustment under the "C" Series was made from 3rd April, 1941, when the pension rate became £55 18s. per annum.

The basis for adjustments was amended in November, 1941, which provided that if the price index-number for the quarter immediately preceding that in which the rate was reviewed exceeded 981, the rate per annum should be £58 10s. plus £1 6s. for every 23 units, or portion thereof, by which the index-number exceeded 981. If the index-number subsequently fell the rate should where necessary, be reduced to accord with the rate determined as above, provided that it should not, in any event, be reduced to less than £58 10s.

An increase of £1 6s. per annum in the rate became due in January, 1942, but was taken back to 11th December, 1941, the date on which the amendment came into operation. The amendment also provided for an additional increase of £3 18s. per annum, raising the rate of pension to £61 2s. per annum from that date. By the price index adjustment the pension rate was further increased to £62 8s. per annum from 2nd April, 1942.

Under the December, 1940, amendment, pensions to inmates of institutions were also increased from 6s. to 6s. 6d. per week, and provision made for their future adjustment in accordance with the variations of the price index-number to the extent of not more than half the amount of the increase in the rate of pension on a weekly basis. Pensions to inmates of institutions were subsequently increased as follows:—6s. 9d. from 3rd April, 1941; 7s. 9d. from 11th December, 1941; and 8s. from 2nd April, 1942.

In May, 1942, the rate of pension was increased to £65 per annum, the new rate being applied to the "C" Series Index-number (1053) for the quarter ended 31st March, 1942. The quarterly adjustment of £1 6s. was retained, but the number of units required was changed from 23 to 21. The rate of pension payable to inmates of institutions was also increased to 8s. 6d. per week. These amendments came into operation on 9th July, 1942, but applied retrospectively from 2nd April, 1942. The provision for the suspension of pension payments when a pensioner becomes an inmate of a hospital was also repealed under the May, 1942, amendment. Further increases in the "C" Series Index-number brought the annual rate to £70 4s. (£1 7s.) per week from the 19th August, 1943. Subsequently, the adjustment provision in accordance with the "C" Series was repealed.

During 1939-40 all invalid pensions in force were specially reviewed, and at 30th June, 1940, all those pensioners who had become qualified for old-age pensions by age and residence were transferred to the old-age pension list. This transference has been continued in 1940-41 and 1941-42, though the numbers involved were naturally much smaller.

Further explanation of pension rates and other matters incorporated in the act above referred to are given in the *Invalid and Old-age Pensions Handbook* issued by the Commissioner of Pensions.

2. *Old-age Pensions.*—(i) *Number in force.* At 30th June, 1941, there were 276,760 old-age pensions in force. During 1941-42, 25,198 pensions claims were granted, and 174 pensioners were transferred from the invalid pension list, while 26,676 pensions expired through cancellations and deaths. The net decrease for the year was 1,304 and the total in existence at 30th June, 1942, 275,456.

(ii) *Sexes of Pensioners—States.* Of the pensioners at 30th June, 1942, 107,432 (or 39 per cent.) were males, and 168,024 (or 61 per cent.) were females. Details for each State are as follows:—

**OLD-AGE PENSIONS : SEXES OF PENSIONERS AT 30th JUNE, 1942.**

State.	Males.	Females.	Total.	Masculinity.(a)
New South Wales .. ..	43,235	67,229	110,464	64.31
Victoria .. ..	27,425	47,815	75,240	57.36
Queensland .. ..	15,443	20,429	35,872	75.59
South Australia .. ..	8,835	15,206	24,041	58.10
Western Australia .. ..	8,189	10,967	19,156	74.66
Tasmania .. ..	4,305	6,378	10,683	67.50
Total .. ..	107,432	168,024	275,456	63.94

(a) Number of males to each 100 females.

(iii) *Ages and Conjugal Conditions of Pensioners.* The recorded ages of the 25,198 persons (10,892 males and 14,306 females) to whom pensions were granted during the year 1941-42 varied considerably, ranging from 5,047 at age 60 to 1 at age 95, but 19,534 were in the 60-70 group. The conjugal condition of these new pensioners was as follows:—Males—single, 1,946; married, 7,082; and widowed, 1,864. Females—single, 2,169; married, 6,594; and widowed, 5,543.

3. *Invalid Pensions.*—(i) *Number in force, 1941-42.* The number of invalid pensioners increased from 58,921 in 1940-41 to 60,597 in 1941-42, an increase of 1,676. Total pensions granted during the year were 9,358, while 7,508 pensions became inoperative through cancellations or deaths, and 174 were transferred to the old-age pension list.

(ii) *Sexes of Pensioners.* Of the 60,597 persons in receipt of invalid pensions on 30th June, 1942, 26,940, or 44 per cent. were males, and 33,657, or 56 per cent. were females. Details for the several States are as follows:—

**INVALID PENSIONS : SEXES OF PENSIONERS AT 30th JUNE, 1942.**

State.	Males.	Females.	Total.	Masculinity.(a)
New South Wales .. ..	12,251	15,967	28,218	76.72
Victoria .. ..	5,646	6,904	12,550	81.78
Queensland .. ..	4,483	4,684	9,167	95.71
South Australia .. ..	1,727	2,654	4,381	65.07
Western Australia .. ..	1,565	1,992	3,557	78.56
Tasmania .. ..	1,268	1,456	2,724	87.09
Total .. ..	26,940	33,657	60,597	80.04

(a) Number of males to each 100 females.

(iii) *Ages and Conjugal Conditions of Pensioners, 1941-42.* The recorded ages of the 9,358 persons (4,984 males and 4,374 females) to whom invalid pensions were granted during 1941-42 varied from 16 to 85, 4,552 or 49 per cent. being in the 45-59 years age-group.

The conjugal condition of persons to whom invalid pensions were granted during the year was as follows:—Males—single, 2,237; married, 2,473; and widowed, 274. Females—single, 2,031; married, 1,295; and widowed, 1,048.



4. **Cost of Administration.**—The total cost of administering the Invalid and Old-age Pensions Department in 1941-42 was approximately £120,000, or 0.62 per cent. of the amount paid to pensioners and to Benevolent Asylums and Hospitals. The corresponding cost in 1940-41 was approximately £132,000, or 0.76 per cent. of the total payments.

The actual sum disbursed in old-age and invalid pensions in the financial year 1941-42, apart from the cost of administration and including the amount paid to asylums and hospitals for the maintenance of pensioners, was £19,257,025 (5s. per head of mean population) and in 1940-41, £17,366,365 (49s. 2d. per head).

5. **Summary.**—The following table gives details concerning the operations of the Act for the last six years :—

#### INVALID AND OLD-AGE PENSIONS : SUMMARY, AUSTRALIA.

Year ended 30th June--	Number of Pensioners.				Amount Paid in Pensions.	Total Payment to Pensioners and Institutions.	Cost of Administration (approximate.)	Cost of Administration per £100 paid to Pensioners and Institutions (approximate.)	Average Fortnightly Pension as at 30th June.
	Old-age.		Invalid.	Total.					
	No.	Est. No. per 1,000 of persons eligible on age qualification. (a)							
			No.	No.	£	£	£	s. d.	s. d.
1937	215,690	361	83,306	299,086	13,827,636	13,998,793	118,851	17 0	636 8
1938	224,154	372	86,096	310,250	15,615,428	15,798,687	124,000	15 8	638 0
1939	232,836	376	88,812	321,648	15,798,038	15,991,782	128,000	16 0	38 5
1940	272,896	427	58,696	331,592	16,250,064	16,450,245	130,000	15 10	38 0
1941	276,760	428	58,921	335,681	17,147,509	17,366,365	132,000	15 2	641 5
1942	275,456	411	60,597	336,053	19,058,159	19,257,025	120,000	12 6	648 4

(a) Based on an estimate of the aggregate of males aged 65 and over and females aged 60 and over at 30th June of each year. (b) Changes in rate—see par. 1, page 579. (c) Transfer from invalid to old-age pension list—see par. 1, page 580.

Separate particulars of the payments to invalid and to old-age pensioners are not available but the annual liability at 30th June, 1942, together with the total payments in 1941-42 are given hereunder :—

#### INVALID AND OLD-AGE PENSIONS : PAYMENTS AND ANNUAL LIABILITY.

State.		Payments Invalid and Old-age Pensions, 1941-42. (a)	Annual Liability at 30th June, 1942.		
			Old-age Pensions.	Invalid Pensions.	Total.
		£	£	£	£
New South Wales (b)	..	7,865,515	6,941,194	1,800,370	8,741,564
Victoria ..	..	5,103,542	4,730,362	798,148	5,528,510
Queensland ..	..	2,567,591	2,259,634	582,660	2,842,294
South Australia (c)	..	1,637,081	1,487,044	275,990	1,763,034
Western Australia ..	..	1,318,672	1,193,530	225,706	1,419,236
Tasmania ..	..	764,624	665,184	171,990	837,174
Total ..	..	19,257,025	17,276,948	3,854,864	21,131,812

(a) Includes amounts paid to Benevolent Asylums and Hospitals for the maintenance of pensioners.  
 (b) Includes Australian Capital Territory. (c) Includes Northern Territory.

## § 7. Child Endowment.

1. **General.**—The Child Endowment Act, assented to on 7th April, 1941, came into operation on 1st July, 1941. During the year 1941-42, 510,347 claims were granted. Cancellations amounted to 22,673 and the total claims in force at 30th June, 1942, were 487,674. For particulars of the main provisions of the Act see Chapter XV., § 4, and for Pay-roll Tax see page 550 of this Chapter.

2. **Summary.**—The following table shows particulars of the operations of the Child Endowment Act during the year ended 30th June, 1942 :—

## CHILD ENDOWMENT : SUMMARY, 1941-42.

State.	Claims in force at end of year.	Endowed Children.		Total Payments to Endowees and Institutions.	Annual Liability at 30th June, 1942.	
		No.	Average No. per Claim.		Total.	Average Liability per Claim.
				£	£	£
New South Wales..	192,558	356,460	1.85	4,472,837	4,633,980	24.07
Victoria..	124,463	219,680	1.77	2,809,529	2,855,840	22.95
Queensland ..	76,127	145,180	1.91	1,861,898	1,887,340	24.79
South Australia ..	39,231	68,567	1.75	859,523	891,371	22.72
Western Australia	37,166	68,533	1.84	841,740	890,929	23.97
Tasmania ..	18,129	37,138	2.05	457,336	482,794	26.63
<b>Total</b> ..	<b>487,674</b>	<b>895,558</b>	<b>1.84</b>	<b>11,302,863</b>	<b>11,642,254</b>	<b>23.87</b>

(a) In addition, there were 14,289 children in 246 institutions receiving child endowment benefit.

The cost of administration was £137,637 or 1.22 per cent. of the total payments made.

3. **Number of Children.**—The following table shows the number of claims in force, the number of endowed children and the number of unendowed children in endowed families, classified according to the number of children in the family :—

## CHILD ENDOWMENT : NUMBER OF CHILDREN AT 30th JUNE, 1942.

Size of Family.	Claims in force at 30th June, 1942.	Children.		
		Endowed.	Unendowed in Endowed Families.	Total in Endowed Families.
Two children ..	260,789	260,789	260,789	521,578
Three ..	124,796	249,592	124,796	374,388
Four ..	56,488	169,464	56,488	225,952
Five ..	25,323	101,292	25,323	126,615
Six ..	11,880	59,400	11,880	71,280
Seven ..	5,202	31,212	5,202	36,414
Eight ..	2,143	15,001	2,143	17,144
Nine ..	759	6,072	759	6,831
Ten ..	225	2,025	225	2,250
Eleven ..	51	510	51	561
Twelve ..	15	165	15	180
Thirteen ..	3	36	3	39
<b>Total</b> ..	<b>487,674</b>	<b>895,558</b>	<b>487,674</b>	<b>1,383,232</b>

It should be noted that the word "children," as used in the foregoing tables, means children under sixteen years of age, as defined by the Act.

### § 8. Widows' Pensions.

1. **General.**—The Widows' Pension Act, assented to on 5th June, 1942, provides for the payment, subject to certain conditions of residence, character, property and nationality, (a) of a pension of £78 per annum (£1 10s. per week) to widows maintaining one or more children and (b) of a pension of £65 per annum (£1 5s. per week) to widows not maintaining children, but who are not less than 50 years old. The value of real and personal property permissible in respect of class (a), after deductions of charges and encumbrances thereon and excluding the value of a house owned and resided in, together with furniture and personal effects, must not exceed £1,000. For class (b) £400 is the maximum. The rate of pension is reducible by the amount by which a widow's other income exceeds £32 10s. per annum (12s. 6d. per week), and, in the case of a widow in class (b), by £1 per annum for every complete £10 by which the value of her real and personal estate, as defined above, exceeds £50. Board and lodging received is regarded as income, and, in the case of widows in class (a), 5 per cent. of the value of the real personal property as defined above, or the net income therefrom, whichever is the greater. Payment by way of gift or allowance from a son or daughter is not regarded as income. Pensions may not be received at the same time under the Invalid and Old-age and Widows' Pensions Acts.

The Act also provides, in respect of widows not maintaining children and who are under 50 years of age, for the payment, in the case of necessitous circumstances, of an allowance of £1 5s. per week for a period not exceeding 26 weeks immediately after the death of the husband.

The term "widow" includes a dependent female (i.e., a woman, who for not less than three years immediately prior to his death, has been living with a man, though not legally married to him, on a permanent and *bona fide* domestic basis); a deserted wife; a woman whose marriage has been dissolved and who has not remarried; and a woman whose husband is an inmate of a hospital for the insane.

The first payment under the Act was made on 27th July, 1942. The number of pensions current at 30th June, 1943, was 38,402, and the amount paid during 1942-43 was £2,358,998.

### § 9. Maternity Allowance.

1. **General.**—The Maternity Allowance Act 1912-1943 makes provision for the payment of maternity allowances. The most important conditions in the original Act were that the sum of five pounds was payable in the case of each confinement resulting in the birth of a viable child whether such child was born alive or dead. The mother must be a native of Australia or intend to settle permanently therein. No payment is made to aliens. The Act was amended in May, 1942, to provide for the allowance to be paid to aboriginal natives of Australia, subject to certain conditions. The Financial Emergency Act 1931 reduced the allowance payable to £4 and limited the application of the original Act to those cases where the combined income of husband and wife did not exceed £260 (reduced to £208 by the Financial Emergency Act 1932) in the previous 12 months. There were further subsequent changes and at 30th June, 1943, the income limit was £247, with an additional £13 in respect of each previous living child under 14, the maximum being £338. The amount of the allowance was £4 10s. where there was no previous living child under 14, £5 where there were one or two previous living children under 14 and £7 10s. where there were three or more such children.

Under an amendment to the Act, assented to on 29th March, 1943, provision was made for the following allowances to take effect in respect of births on or after 1st July, 1943 :—(a) where there are no other children, £5; (b) where there are one or two other children, £6; and (c) where there are three or more other children, £7 10s.; together with the payment of £1 5s. for each of the four weeks before and after the child's birth.



In addition, the sub-sections of the principal Act relating to income qualifications were repealed. The following table gives a summary in connexion with the working of the Maternity Allowance Act for the years 1937-38 to 1941-42 :—

### MATERNITY ALLOWANCE : SUMMARY.

Year.	Claims Paid.	Claims Rejected.	Amount Paid.	Cost of Administration (approximate).	Cost per £100 allowance paid (approximate).
	No.	No.	£	£	£ s. d.
1937-38 ..	79,000	5,931	400,004	15,671	3 18 4
1938-39 ..	80,916	6,272	436,614	16,959	3 17 8
1939-40 ..	77,352	6,779	416,964	17,181	4 2 5
1940-41 ..	75,692	8,184	407,533	14,852	3 12 11
1941-42 ..	66,391	12,790	358,538	11,717	3 5 4
Aggregate— 1912-13 to 1941-42 ..	3,335,977	88,581	16,433,893	416,455	2 10 8

2. Claims paid in each State.—The following table shows the number of maternity allowance claims paid in each State during the last five years :—

### MATERNITY ALLOWANCE : CLAIMS PAID IN EACH STATE.

Year ended 30th June—	N.S.W. (a)	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	Total.
	No.	No.	No.	No.	No.	No.	No.	No.
1938 .. ..	30,440	20,160	12,660	6,656	5,026	4,029	29	79,000
1939 .. ..	30,860	20,819	12,880	7,162	5,213	3,940	42	80,916
1940 .. ..	29,700	19,660	12,290	7,009	4,774	3,883	36	77,352
1941 .. ..	28,540	19,150	12,481	6,831	4,775	3,877	38	75,692
1942 .. ..	24,481	16,120	12,113	5,724	4,320	3,620	13	66,391
Total, 1912-13 to 1941-42 ..	1,321,967	869,214	497,736	290,484	211,700	143,761	1,115	3,335,977

(a) Includes Australian Capital Territory.

## § 10. Commonwealth Public Service Superannuation Fund.

This Fund, which was inaugurated on 20th November, 1922, is maintained by contributions of officers of Parliament, of employees of the Commonwealth Public Service and the Defence Departments, and by payments from Consolidated Revenue, the

latter being made when the officers retire on pension. Full particulars as to the benefits, etc., will be found in Official Year Book, No. 18, p. 383. In September, 1937, legislation was passed extending superannuation rights to approximately 1,600 employees of the Repatriation Commission, the War Service Homes, the High Commissioner's Office, London, and the Council for Scientific and Industrial Research. During the same year a new feature, in the form of the Provident Account, was introduced. This provides for compulsory contributions in respect of those, who, through physical disabilities or failure to pass the required medical examination, are ineligible to contribute to the Superannuation Fund. Any other, whose contribution to the Superannuation Fund for the first two units of pension is in excess of the rate for age 45 years and above 5 per cent. of his salary, may elect to transfer to the Provident Account.

The number of contributors to the fund at 30th June, 1942, was 45,478 (40,435 males and 5,043 females) and the average pension contributed for was 5.185 units or £134 16s. 2d. per annum.

The income for the year 1941-42 was £1,104,635, of which officers' contributions represented £709,126 and interest on investments, etc. (excluding accrued interest), £269,791. The expenditure for the year was £234,054 of which £170,132 represented pension payments. At 30th June, 1942, the total funds invested amounted to £9,989,690 (at cost). The average rate of interest on investments at 30th June, 1942, was £4 1s. 4d. per cent.

Pensions in force on 30th June, 1942, including contributory and non-contributory but excluding commuted pensions, numbered 7,586, with a net annual liability of £668,380 of which £490,214 represented the share payable from the Consolidated Revenue Fund.

## § 11. Currency and Coinage.

1. **Australian Mints.**—Soon after the discovery of gold in Australia a branch of the Royal Mint was established in Sydney. The formal opening took place on 14th May, 1855. The Melbourne branch was opened on 12th June, 1872, and the Perth branch on 20th June, 1899. The States of New South Wales, Victoria and Western Australia provided an annual endowment in return for which the mint receipts were paid into the respective State Treasuries, and it might be said until recently that, apart from expenditure on buildings, new machinery, etc., the amounts paid into the Treasuries fairly balanced the mint subsidies. Early in 1923, however, it was announced that owing to losses incurred in the operations of recent years, the British Treasury in consultation with the New South Wales Government had decided to close the Sydney branch at the end of 1923. This decision was, however, not carried out until the end of 1926.

2. **Standard Weight and Fineness of Coinage.**—In addition to coins minted at Melbourne and Perth mints. Imperial silver coins legally current in England and which were minted prior to 31st March, 1920, when the fineness was reduced from .925 to .500, are also legal tender in Australia where the fineness of silver coin is .925. The circulation of Imperial silver currency in Australia has practically ceased, as the ruling exchange rate has made it profitable to transfer to London all coins legally current there. Sovereigns coined at the Royal Mint, London, or at any of its branches throughout the Empire are legal tender in Australia. The provisions as to legal tender are—gold coins, legal tender to any amount, silver for an amount not exceeding forty shillings, and bronze up to one shilling. The standard weights of the sovereign and half-sovereign are respectively 123.27447 grains and 61.63723 grains, but these coins will pass current if they do not fall below 122.5 grains and 61.125 grains respectively. Gold coins have ceased to circulate in Australia and Commonwealth Bank Notes are legal tender to any amount.

3. **Gold Receipts and Issues.**—(i) *Receipts.* The receipts of gold during 1942 and the aggregate at each mint to the end of 1942 were as follows :—

**AUSTRALIAN MINTS : RECEIPTS OF GOLD, 1942, AND TOTAL.**

Mint.	Deposits during 1942.	Total to end of 1942.		
		Quantity.		Value. (b)
		Gross.	Fine.	
	Oz.	Oz.	Oz.	£
Sydney(a) ..	..	42,082,928	36,907,045	156,771,141
Melbourne ..	343,031	46,107,460	41,385,745	175,795,355
Perth.. ..	1,187,411	46,326,806	37,166,669	157,873,868
<b>Total ..</b>	<b>1,530,442</b>	<b>134,517,194</b>	<b>115,459,459</b>	<b>490,440,364</b>

(a) To end of 1926.

(b) At £3 17s. 10½d. per standard ounce.

In cases of deposits containing over a certain minimum of silver, the excess is paid for at the rate fixed from time to time by the Deputy-Master of the branch mint concerned.

(ii) *Issues.* The Australian mints issue gold bullion partly for the use of local manufacturers (jewellers and dentists), and partly for export. Since September, 1931, when the United Kingdom departed from the gold standard, the minting of gold coins by Australian mints has ceased. Australian exports of gold are mainly in the form of 400-oz. ingots, but in earlier years a considerable amount of gold was shipped in 10-oz. bars to India. During recent years the export was subject to regulation by the Commonwealth Government. The issues during 1942, and the total to the end of that year, are shown in the table below :—

**AUSTRALIAN MINTS : ISSUES OF GOLD.**

Mint.	Coin.			Bullion. (a)	Total.
	Sovereigns.	Half-sovereigns.	Total.		
	£	£	£	£	£
1942—					
Melbourne ..	..	..	..	1,173,192	1,173,192
Perth ..	..	..	..	3,607,914	3,607,914
<b>Total, 1942</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>4,781,106</b>	<b>4,781,106</b>
Aggregate—					
Sydney ..	144,435,550	4,781,000	149,216,550	7,574,408	156,790,958
Melbourne ..	147,283,131	946,780	148,229,911	27,574,257	175,804,168
Perth ..	106,384,197	367,338	106,751,535	51,140,298	157,891,833
<b>Total to end of 1942 ..</b>	<b>398,102,878</b>	<b>6,095,118</b>	<b>404,197,996</b>	<b>86,288,963</b>	<b>490,486,959</b>

(a) Value expressed at £3 17s. 10½d. per standard ounce.



4. **Price of Gold.**—In consequence of Great Britain's departure from the gold standard on 21st September, 1931, the market value of gold immediately rose by about 17½ per cent. from £4 4s. 11d. to £4 19s. 7d. per fine ounce. Considerable fluctuations have since taken place, but over the last few years the price has been steadily rising. At the outbreak of the present War the price in London was fixed at £stg.8.4 per fine ounce. In issues of the Official Year Book prior to No. 33 the Australian prices shown were calculated from the London price, but in view of this fixation the prices shown in the following table represent the Commonwealth Bank's buying price for gold lodged at the mints in Australia.

The table shows the prices in London and Australia for 1935-36 and following years, and for each month from July, 1942, to June, 1943. Particulars are also shown for the value of the sovereign.

**PRICE OF GOLD : LONDON AND AUSTRALIA, 1935-36 to 1942-43.**

Period.	London.		Australia.(a)			
	Average price per fine oz.	Average value of Sovereign.	Average price per fine oz.	Sovereign.		Equivalent to a premium of—
				Average value.		
	£s s. d.	£s s. d.	£A s. d.	£A s. d.		%
<b>Average for Year—</b>						
1935-36 ..	7 0 9	1 13 2	8 14 0	2 1 0		105.0
1936-37 ..	7 0 10	1 13 2	8 15 3	2 1 3		106.2
1937-38 ..	7 0 0	1 13 0	8 13 10	2 0 11		104.6
1938-39 ..	7 6 9	1 14 7	9 2 9	2 3 0		115.0
1939-40 ..	8 4 10	1 18 8	10 8 4	2 9 1		145.4
1940-41 ..	8 8 0	1 19 7	10 13 5	2 9 2		145.8
1941-42 ..	8 8 0	1 19 7	10 11 4	2 8 7		142.9
1942-43 ..	8 8 0	1 19 7	10 9 0	2 8 0		140.0
<b>Average for Month—</b>						
<b>1941-42—</b>						
July ..	8 8 0	1 19 7	10 14 0	2 9 3		146.3
August ..	8 8 0	1 19 7	10 14 0	2 9 3		146.3
September ..	8 8 0	1 19 7	10 14 0	2 9 3		146.3
October ..	8 8 0	1 19 7	10 14 0	2 9 3		146.3
November ..	8 8 0	1 19 7	10 13 4	2 9 2		145.7
December ..	8 8 0	1 19 7	10 11 0	2 8 6		142.5
January ..	8 8 0	1 19 7	10 9 7	2 8 2		140.8
February ..	8 8 0	1 19 7	10 9 0	2 8 0		140.0
March ..	8 8 0	1 19 7	10 9 0	2 8 0		140.0
April ..	8 8 0	1 19 7	10 9 0	2 8 0		140.0
May ..	8 8 0	1 19 7	10 9 0	2 8 0		140.0
June ..	8 8 0	1 19 7	10 9 0	2 8 0		140.0
<b>1942-43 ..</b>			<b>Unchanged from February, 1942.</b>			

NOTE.—“£s” represents £'s sterling, while Australian £'s are indicated by “£A.”

(a) Based on the Commonwealth Bank's buying price for gold lodged with the mints. Particulars in previous issues are calculated from the London price. The average value of sovereigns from September, 1939 onwards is the direct quotation of the Commonwealth Bank. In respect of earlier figures the value has been calculated from the gold price, one sovereign being estimated at .23542 fine ounces in weight.

5. *Silver and Bronze Coinage.*—(i) *Prices of Silver.* Particulars for recent years are shown in Chapter XX. "Mineral Industry".

(ii) *Profits on Coinage of Silver.* As sixty-six shillings are coined out of one pound troy of standard silver (.925 fine), the silver required to produce £3 6s. of coin costs, at the average 1940 London market price of 1s. 10.3d. per ounce, approximately 22s. 4d. The difference nearly represents, therefore, the gross profit or seigniorage made on the coinage of every £3 6s. Negotiations between the Imperial authorities and the Governments of New South Wales and Victoria for the coinage of silver and bronze coin in Australia extended over a number of years but no decision was arrived at. As section 51 of the Commonwealth Constitution makes legislation concerning "currency, coinage, and legal tender" a Commonwealth matter, the question remained in abeyance until 1907, when the matter was discussed at the Colonial Conference, London, with the result that in the latter part of 1908 the Commonwealth Treasurer announced his intention of initiating the coinage. Since 1916 silver and bronze coins have been minted in Australia on behalf of the Commonwealth Treasury. Crowns were minted to the value of £250,200 in 1937 and £25,400 in 1938. Issues were made during 1936–37 (£200,000), 1937–38 (£50,000), 1938–39 (£25,000) and 1939–40 (£600). These coins have now practically disappeared from circulation.

(iii) *Silver and Bronze Issues.* The total issues of silver and bronze coinage on account of the Commonwealth since 1910, as obtained from returns furnished by the Treasury, are set out in the following table :—

#### AUSTRALIAN MINTS : SILVER AND BRONZE ISSUES BY TREASURY.

Year.	Silver.						Bronze.		
	5s.	2s.	1s.	6d.	3d.	Total.	1d.	½d.	Total.
	£	£	£	£	£	£	£	£	£
1910 to 1934 ..	4,000,400	1,875,700	890,500	853,900	7,620,500	368,523a	133,625	502,148	
1934–35 ..	140,400	24,200	24,000	29,800	218,400	17,390	6,770	24,160	
1935–36 ..	167,500	34,400	46,800	49,400	298,100	23,920	8,050	31,970	
1936–37 ..	200,000	208,600	13,000	47,000	39,200	507,800	17,180	6,190	23,370
1937–38 ..	50,000	365,000	93,600	59,700	65,200	633,500	26,770	7,130	33,900
1938–39 ..	25,000	77,400	30,000	47,800	39,400	219,600	30,660	11,140	41,800
1939–40 ..	600		36,800	41,600	50,600	306,400	20,770	5,280	26,050
1940–41 ..		1,161,000	83,400	66,800	83,200	1,394,400	45,820	7,600	53,420
1941–42 ..		1,505,800	69,000	53,000	64,400	1,692,200	57,230	20,270	77,500
Total	275,600	7,811,900	2,260,100	1,277,200	1,275,100	12,899,900	608,263	206,055	814,318

(a) Includes £4,100 issued to New Zealand.

6. *Australian Note Issue.*—(i) *General.* Information in some detail regarding Australian Notes has been given in earlier issues of the Official Year Book. In December, 1920, the assets and liabilities of the Treasurer under the Australian Notes Act 1910–1914 were transferred to the Note Issue Department of the Commonwealth Bank and control of the Australian Note Issue was placed under the Board of Directors of this Department. Under the Commonwealth Bank Act 1924 control of the Note Issue passed to the Board of Directors of the Commonwealth Bank.

(ii) *Reserve against Note Issue.* Prior to 19th June, 1931, the reserve held in gold against the note issue was fixed at 25 per cent. of the total notes in circulation. To permit further shipments of gold to meet short-term obligations in London, an Amending Act reduced the statutory gold reserve to 15 per cent. with provision for the restoration by graduations to 25 per cent. within a period not exceeding five years. A further Amending Act provided that portion of the note issue reserve may be held in British sterling, which was defined as follows :—(a) Balances standing to the credit of the Bank at the Bank of England or at any other of its bankers in London ; (b) Bills of Exchange

or advances secured thereby which will mature in not more than three months and which are payable in the United Kingdom in currency which is legal tender therein; and (c) Treasury Bills or other securities of the United Kingdom which will mature in not more than three months.

(iii) *Notes in Circulation.* Particulars of the average notes in circulation and of the gold reserve for the years 1938-39 to 1942-43 are given in the following table:—

#### AUSTRALIAN NOTE ISSUE.

Particulars.	Average of monthly statements for year—				
	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
Notes held by—	£	£	£	£	£
Banks .. ..	15,454,157	13,605,581	14,191,386	14,693,296	15,265,006
Public .. ..	33,117,633	39,115,467	49,427,607	68,774,909	107,716,362
Total .. ..	48,571,790	52,721,048	63,618,993	83,468,205	122,981,368
Gold Reserve (a) ..	16,020,486	16,055,560	17,080,194	21,005,190	31,524,276
Percentage of Reserve on ..	%	%	%	%	%
Total Issue .. ..	33.0	30.6	26.9	26.2	25.6

(a) Includes English sterling.

Details of the average value of each of the several denominations of Australian Notes outstanding in 1914 and later years are given in the *Finance Bulletins* issued by this Bureau.

(iv) *Note Issue Department—Australian Notes Account at 30th June, 1943.* The following statement shows particulars of liabilities and assets of the Note Issue Department of the Commonwealth Bank as at 30th June, 1943.

#### AUSTRALIAN NOTES ACCOUNT : 30th JUNE, 1943.

Liabilities.		Assets.	
	£		£
Notes in circulation ..	140,012,068	Gold and English sterling ..	36,391,463
Reserve for Notes not presented .. ..	141,358	Debentures and other Securities .. ..	112,974,930
Special Reserve—premium on gold sold .. ..	7,754,955	Other Assets .. ..	130,549
Other Liabilities .. ..	1,558,561		
Total Liabilities .. ..	149,496,942	Total Assets .. ..	149,496,942

To date, the net profits of the Note Issue Department have been paid to the Commonwealth Treasury. In 1942-43 they amounted to £2,247,702. The amendment to the Commonwealth Bank Act, which established a Mortgage Bank Department (see page 505), provides for the annual payment from the Note Issue Profits of £150,000 and for the transfer of £1,000,000 from the Special Reserve towards the capital of the new department, the former payments to cease when the capital shall have amounted to £4,000,000.



7. **Legal Tender Extant.**—Accurate information regarding the amount of token money in circulation is not available, but the following table gives an estimate of the amount of legal tender extant about the middle of the years 1938 to 1942.

**ESTIMATED LEGAL TENDER EXTANT : AUSTRALIA.**

Particulars.	1938.	1939.	1940.	1941.	1942.
Australian Note Issue(a)—	£'000.	£'000.	£'000.	£'000.	£'000.
Held by Banks .. .. .	17,630	14,829	13,937	14,044	16,126
Held by Public .. .. .	31,404	32,701	46,938	53,820	86,488
Notes of Trading Banks outstanding(b)	167	167	167	167	167
Coin—Gold—Held by Banks(c) ..	48	79	75	49	63
Held by Public .. .. .	..	..	..	..	..
Silver—Held by Banks(c) ..	2,601	2,508	1,925	2,444	1,847
Held by Public .. .. .	6,514	6,843	7,738	8,633	10,923
Bronze—Held by Banks(c) ..	117	132	125	111	67
Held by Public .. .. .	494	521	554	622	743
<b>Total</b> .. .. .	<b>58,975</b>	<b>57,780</b>	<b>71,459</b>	<b>79,890</b>	<b>116,424</b>

(a) Last Monday in June.

(b) Average for June quarter.

(c) At 30th June.

The figures given above for silver coin represent the total issues of Australian silver coin less the excess of exports of Australian coins to New Zealand and the Pacific Islands over the reimports of Australian coins. The amount of English coin in circulation in Australia is negligible, and as it is not possible to ascertain accurately its volume, no allowance has been made therefor. The figures given for bronze coins refer to the total issues of Australian coin, the small amount of British coin in circulation being disregarded.

## C.—STATE FINANCE.

### § 1. General.

1. **Functions of State Governments.**—In comparing the financial returns of the States, allowance must be made for the various functions discharged by the respective Governments, and for local conditions in each case. Direct comparisons of the revenue, expenditure and debt of the individual States are difficult, owing to the fact that functions which in one State are assumed by the Central Government are in another relegated to municipal or semi-governmental bodies which are vested with certain defined borrowing powers and whose financial transactions are not included with those of the Central Government. Care, therefore, is needed in instituting comparisons, and the particulars contained in this Chapter should be read with those contained in Chapter XVIII., "Local Government". In many respects, moreover, the budgets of the Australian Governments differ materially from those of most European countries, owing to the inclusion therein of the revenue and expenditure of departments concerned in rendering public services, such as railways, tramways, water supply, etc., which in other countries are often left to private enterprise.

2. **Accounts of State Governments.**—The various financial transactions of the States are in each case mainly concerned with one or other of three Funds—the "Consolidated Revenue Fund", the "Trust Fund", and the "Loan Fund". All revenue (except certain taxation items paid into special funds) collected by the State is placed to the credit of its Consolidated Revenue Fund, from which payments are made under the authority of an Annual Appropriation Act passed by the Legislature, or by a permanent appropriation under a Special Act.

Figures relating to New South Wales represent the transactions of the Consolidated Revenue Fund and the Business Undertakings included in the Annual Budget Papers. These latter are as follows :—Railways, Tramways and Omnibuses, Sydney Harbour Trust Section of the Maritime Services Board, and Road Transport and Traffic Fund. Deductions have been made from the Budget figures, however, in order to obviate duplications caused by inter-fund payments and to maintain uniformity from year to year in the presentation of statistics. In respect of the year 1941-42, a deduction of £795,540 has thus been made from the Budget Revenue total of £66,661,218 and of £959,646 from the expenditure total of £65,783,839. Particulars for all other States relate to the transactions of the Consolidated Revenue Fund and no adjustments have been made thereto.

On 16th December, 1938, it was enacted that, in order to provide for the co-ordination, regulation, control and improvement of transport in Tasmania, a Transport Commission, consisting of a Commissioner and two Associate Commissioners, should be constituted. This Commission was given control of all means of transport by road, rail or air within the State, other than those operated by private owners or by local government authorities. Revenue was provided for by allotting to the Commission receipts from the operations of the various forms of Government transport, registration and licence-fees in respect of motor vehicles, etc., motor taxation collections, etc. In addition, the State Treasurer was required to pay to the Commission all moneys made available by the Commonwealth from the proceeds of petrol taxation, and all land tax collections. This Act became effective on 1st July, 1939. The separation of the Commission's financial transactions from the Consolidated Revenue Fund has therefore occasioned considerable decreases in the figures since 1939-40 as compared with those for the previous years.

The Trust Fund comprises all moneys held in trust by the Government, and includes such items as savings banks funds, sinking funds, insurance companies' deposits, etc.

The Loan Fund is debited with all loan moneys raised by the State, and credited with the expenditure therefrom on public works or other purposes.

3. **Inter-relation of Commonwealth and State Finances.**—In regard to the inter-relation of Commonwealth and State Finances, a statement in some detail, covering the period from the inception of Federation to the passing of the Financial Agreement Act 1928, was published in Official Year Book, No. 22, pages 379-80. On page 563 of this issue details are given in regard to the constitutional and other requirements of the distribution of Commonwealth revenues.

## § 2. Consolidated Revenue Funds.

### Division I.—Revenue.

1. **General.**—The principal sources of State revenue are :—

- (a) Taxation ; (b) The business undertakings controlled by the State Governments ; (c) Sale of and rental from Crown lands ; (d) Payments by Commonwealth Government under the Financial Agreement, Special Grants and Income Tax and Entertainments Tax Reimbursement Acts ; (e) Interest on advances ; and (f) Miscellaneous sources, comprising fines, fees, etc.

Of these sources, that yielding the largest revenue for the States as a whole is the group of Business Undertakings, the principal contributor being the Government Railways and Tramways. Next in magnitude comes Taxation, followed in order by the Commonwealth Payments and Interest Receipts. Since the introduction, in 1942-43, of the Uniform Tax Scheme, Commonwealth payments have increased while State taxation collections have decreased. The figures in the following tables relate to periods prior to the introduction of the scheme.

2. **Revenue Received.**—The following table furnishes particulars of the total amounts and the amounts per head of consolidated revenue received by the several States during the last five years.

## STATE CONSOLIDATED REVENUE.

Year.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
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## TOTAL COLLECTIONS.

	£	£	£	£	£	£	£
1937-38	53,545,720	27,614,982	17,339,731	12,460,936	10,819,042	3,639,755	125,420,166
1938-39	51,709,735	26,985,548	19,330,369	12,303,597	10,949,660	3,614,764	124,893,673
1939-40	54,754,626	28,102,735	20,755,504	12,755,648	11,119,943	3,055,310a	130,543,766
1940-41	59,895,571	29,182,657	21,539,749	12,924,663	11,432,068	2,921,573a	137,896,281
1941-42	65,865,678	33,112,372	23,662,947	15,002,030	11,940,149	3,358,707a	152,941,883

## PER HEAD OF POPULATION.(b)

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1937-38	19 15 4	14 16 9	17 8 5	21 1 11	23 13 3	15 9 8	18 6 3
1938-39	18 18 3	14 7 10	19 4 0	20 14 0	23 13 4	15 5 2	18 1 6
1939-40	19 16 4	14 17 5	20 7 9	21 7 3	23 17 0	12 16 1a	18 14 5
1940-41	21 9 7	15 3 11	20 18 1	21 12 4	24 8 1	12 3 4a	19 11 5
1941-42	23 8 4	16 18 10	22 17 3	24 15 11	25 9 8	14 0 7a	21 9 11

(a) See § 1 par. 2, page 591.

(b) Based on mean population of each financial year.

3. Sources of Revenue.—(i) *General.* Classifying the revenue of the several States in the manner indicated in par. 1 above, particulars for the year 1941-42 are as follows :—

## STATE CONSOLIDATED REVENUE : SOURCES, 1941-42.

Source of Revenue.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania. (a)	Total.
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## TOTAL REVENUE.

	£	£	£	£	£	£	£
Taxation(b)	22,294,087	11,201,263	8,034,362	4,741,951	3,139,127	1,802,051	51,212,841
Business Under-							
takings	34,827,815	16,662,950	10,446,482	6,746,708	6,102,084	4,648	74,790,687
Lands	1,073,764	530,431	1,583,161	259,197	309,819	76,727	4,439,099
Interest	390,635	1,545,721	1,289,928	959,007	435,724	466,286	5,087,301
Commonwealth pay-							
ments (d)	2,917,411	2,127,159	1,096,235	1,733,816	1,103,432	786,859	9,764,912
Miscellaneous	3,761,966	1,038,848	1,212,779	561,351	849,963	222,136	7,647,043
<b>Total</b>	<b>65,865,678</b>	<b>33,112,372</b>	<b>23,662,947</b>	<b>15,002,030</b>	<b>11,940,149</b>	<b>3,358,707</b>	<b>152,941,883</b>

## PER HEAD OF POPULATION.(e)

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Taxation(b)	7 18 6	5 14 8	7 15 3	7 16 9	6 14 0	7 10 7	7 3 11
Business Under-							
takings	12 7 8	8 10 6	10 1 11	11 3 0	13 0 6	0 0 5	10 10 3
Lands	0 11 11	0 5 6	1 10 7	0 8 7	0 13 3	0 6 5	0 12 6
Interest	0 2 9	0 15 10	1 4 11	1 11 8	0 18 7	1 18 11	0 14 4
Commonwealth pay-							
ments (d)	1 0 9	1 1 9	1 1 2	2 17 4	2 7 1	3 5 9	1 7 5
Miscellaneous	1 6 9	0 10 7	1 3 5	0 18 7	1 16 3	0 18 6	1 7 5
<b>Total</b>	<b>23 8 4</b>	<b>16 18 10</b>	<b>22 17 3</b>	<b>24 15 11</b>	<b>25 9 8</b>	<b>14 0 7</b>	<b>21 9 11</b>

(a) See § 1 par. 2, page 591. (b) In all States certain taxation collections are not paid into Consolidated Revenue Fund. For total collections see next page. (c) Includes £120,000 of Disabilities Grant credited direct to Railway Revenue. (d) Under Financial Agreement Act and Special Grants. (e) Based on mean population of the financial year.



In connexion with the item Business Undertakings, it should be borne in mind that services performed by the Government in one State may, in another, be carried out by a Board or Trust. For instance, in New South Wales and Western Australia the tramway systems are controlled by the Government, while in the other States ownership is largely vested in Trusts or private companies. Harbour and river services and water supply and sewerage are also controlled in some cases by the State and in others by Trusts. As stated in § 1 par. 2 above, all the Tasmanian transport facilities are now controlled by a Commission.

The magnitude of the revenue per head from Business Undertakings in the case of Western Australia is mainly due to railways, the mileage of which is greater per head of population than in other States. In New South Wales and Western Australia the revenue from tramways is also included.

(ii) *Revenue from Taxation.*—(a) *General.* The following table shows for the year 1941-42 particulars of all State taxation collections irrespective of whether such moneys have been paid into the Consolidated Revenue Funds or not. For this reason the particulars hereunder are different from those stated in the tables relating to the Consolidated Revenue Funds, but represent a comprehensive statement of all taxation collections by the Government in each State. In this and the succeeding statements of taxation the collections have been grouped according to the nature of the tax rather than the method of collection. For example, stamp duties on betting tickets and bookmakers' licences have been included under "Entertainment Tax" instead of under "Stamp Duties" and "Licences" respectively:—

#### STATE REVENUE FROM TAXATION : TOTAL COLLECTIONS, 1941-42.

Tax.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
TOTAL COLLECTIONS.							
	£	£	£	£	£	£	£
Probate and Succession Duties	2,775,752	1,426,525	605,375	586,899	180,240	139,980	5,714,771
Other Stamp Duties ..	1,446,042	938,551	489,166	232,732	219,452	75,219	3,401,162
Land .. ..	2,137	516,282	400,987	300,219	135,939	92,809	1,448,373
Income and Dividend ..	16,935,928	5,903,387	3,823,033	2,818,846	2,290,661	1,108,847	32,880,702
Other taxes on Income—							
Unemployment Relief ..	..	1,284,797	..	..	..	..	1,284,797
State Development ..	..	..	2,370,565	..	..	..	2,370,565
Financial Emergency ..	..	..	..	..	40,768	..	40,768
Hospital .. ..	..	..	..	..	292,700	..	292,700
Liquor .. ..	565,714	316,544	92,552	33,259	77,909	33,112	1,119,090
Lotteries .. ..	..	..	64,125	..	..	627,144	341,269
Entertainments (c) ..	499,408	752,250	78,413	278,882	157,562	71,033	1,837,548
Motor .. ..	2,504,005	1,675,256	877,727	505,528	374,380	181,682	6,121,668
Licences, N.E.I. ..	69,008	95,000	130,792	26,841	11,894	3,907	406,065
Other .. ..	..	15,024	..	7,561	30,910	..	..
<b>Total .. ..</b>	<b>24,798,182</b>	<b>12,923,616</b>	<b>8,941,735</b>	<b>4,790,767</b>	<b>3,818,445</b>	<b>1,986,733</b>	<b>57,259,478</b>

(a) Includes Gold Mining Profits Tax, £149,064 (6s. 4d. per head).  
 Lottery Prizes, £181,688 (15s. 2d. per head).

(c) Includes Racing.

(b) Includes Income Tax on

The table hereunder shows the percentage of collections under individual taxes on the total taxation revenue for the year 1941-42 :—

## STATE REVENUE FROM TAXATION : PERCENTAGES ON TOTAL, 1941-42.

Tax.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	%	%	%	%	%	%	%
Probate and Succession Duties	11.10	11.04	6.77	12.25	4.72	7.05	9.98
Other Stamp Duties	5.83	7.26	5.47	4.86	5.75	3.78	5.94
Land	0.01	3.99	4.49	6.26	3.56	4.67	2.53
Income and Dividend	68.30	45.68	42.75	58.84	59.99	55.81	57.42
Other taxes on Income—							
Unemployment Relief	..	9.94	..	..	..	..	2.24
State Development	..	..	26.51	..	..	..	4.14
Financial Emergency	..	..	..	..	1.07	..	0.07
Hospital	..	..	..	..	7.67	..	0.51
Liquor	2.28	2.45	1.04	0.70	2.04	1.67	1.96
Lotteries	..	..	0.72	..	4.12	13.95	0.60
Entertainments	..	..	0.87	5.82	..	3.57	3.21
Motor	10.46	12.96	9.82	10.55	9.80	9.30	10.69
Licences, N.E.I.	0.28	0.74	..	0.56	0.31	0.20	..
Other	..	0.12	1.56	0.16	0.97	..	0.71
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Prior to Federation duties of Customs and Excise constituted the principal source of revenue from taxation. Prior to the introduction of the Uniform Income Tax scheme the most productive State taxes were the various Income Taxes, which, in 1941-42, included Unemployment Relief, State Development and Hospital. Motor taxation, Probate and Succession and other Stamp duties ranked next in importance.

The total amounts and the amounts per head raised from all sources of taxation by the several State Governments, including amounts not paid into the Consolidated Revenue Fund, during the five years ended 1941-42 are given in the following table :—

## STATE REVENUE FROM TAXATION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
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## TOTAL COLLECTIONS.

	£	£	£	£	£	£	£
1937-38	20,504,582	11,646,645	8,539,471	3,998,132	3,288,776	1,697,159	49,674,765
1938-39	20,262,919	12,023,240	8,646,453	4,199,064	3,596,603	1,778,718	50,506,997
1939-40	22,682,127	12,710,662	8,816,448	4,620,118	3,729,558	1,827,902	54,386,815
1940-41	24,535,127	12,547,645	9,180,433	4,419,921	3,893,228	1,727,822	56,304,176
1941-42	24,798,182	12,923,616	8,941,735	4,790,767	3,818,445	1,986,733	57,259,478

## PER HEAD OF POPULATION.(a)

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1937-38	7 11 5	6 5 2	8 11 7	6 15 4	7 3 10	7 4 5	7 5 1
1938-39	7 8 3	6 8 3	8 11 9	7 1 3	7 15 6	7 10 2	7 6 2
1939-40	8 4 2	6 14 6	8 13 3	7 14 9	8 0 0	7 13 2	7 16 0
1940-41	8 16 0	6 10 8	8 18 2	7 7 10	8 6 3	7 3 11	7 19 10
1941-42	8 16 4	6 12 3	8 13 1	7 18 3	8 3 0	8 5 11	8 1 0

(a) Based on mean population of each financial year.

(b) *Probate and Succession Duties.* Probate duties have been levied for many years in all the States, but the provisions of the Acts governing the payment of duty differ widely both in regard to the ordinary rates and those which apply to special beneficiaries. A table showing the values of the estates in which probates and letters of administration were granted is given in Chapter XVI. "Private Finance".

The duties collected for the last five financial years are as follows :—

#### STATE PROBATE AND SUCCESSION DUTIES : NET COLLECTIONS.

State.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
New South Wales ..	2,233,144	2,364,124	2,201,268	2,316,161	2,775,752
Victoria.. ..	1,431,057	1,374,355	1,456,752	1,433,954	1,426,525
Queensland ..	636,207	677,037	658,298	550,806	605,375
South Australia ..	244,512	366,526	563,505	280,289	586,899
Western Australia ..	101,631	123,798	122,442	164,636	180,240
Tasmania ..	107,687	94,669	135,107	127,791	139,980
<b>Total ..</b>	<b>4,754,238</b>	<b>5,000,509</b>	<b>5,137,372</b>	<b>4,754,328</b>	<b>5,714,771</b>

(c) *Other Stamp Duties.* The revenue derived from stamp duties (excluding probate and succession duties and stamp duties on betting tickets) for the last five years is shown in the accompanying table :—

#### OTHER STATE STAMP DUTIES.—NET COLLECTIONS.

State.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
New South Wales ..	1,368,919	1,286,124	1,422,851	1,475,192	1,446,042
Victoria.. ..	952,470	959,727	978,992	973,711	938,551
Queensland ..	632,329	610,110	605,490	538,131	489,166
South Australia ..	277,843	249,729	236,427	236,334	232,732
Western Australia ..	281,417	274,995	250,728	235,666	219,452
Tasmania ..	79,193	84,832	85,626	83,314	75,219
<b>Total ..</b>	<b>3,592,171</b>	<b>3,465,517</b>	<b>3,580,114</b>	<b>3,542,348</b>	<b>3,401,162</b>

(d) *Land Tax.* All the States impose a land tax, Queensland, the last State to fall into line, collecting its first levy in 1915-16. In the other States the impost is of long standing. In New South Wales the State land tax is levied on the unincorporated portion of the western division of the State only.



The following table shows the amounts collected by means of such taxes during the financial years 1937-38 to 1941-42 :—

## STATE LAND TAX : NET COLLECTIONS.

State.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
New South Wales ..	2,237	2,154	2,169	2,411	2,137
Victoria.. ..	498,232	482,336	490,255	492,939	516,282
Queensland ..	405,070	401,682	408,640	407,673	400,987
South Australia ..	325,499	321,482	320,316	306,220	300,219
Western Australia ..	122,856	114,623	99,348	120,515	135,939
Tasmania ..	84,380	85,069	83,769	87,054	92,809
Total .. ..	1,438,274	1,407,346	1,404,497	1,416,812	1,448,373

(e) *Income Tax.* A tax on the incomes of persons, whether derived from personal exertion or from property, was, until the introduction of the Uniform Tax Scheme, imposed in all the States. As might be expected, the rates, exemptions, etc., differed widely, but the general principles of the several Acts were similar.

The following table shows the total amounts collected in the several States during the years 1937-38 to 1941-42. In the cases of Western Australia and Tasmania the amounts of dividend duty collected are included. The tax levied on prizes in lotteries although coming within the Income Tax class has been excluded from the amounts given below.

## STATE INCOME AND DIVIDEND TAXES : NET COLLECTIONS.

State.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
New South Wales ..	6,367,046	6,339,215	7,031,961	7,777,938	16,935,928
Victoria.. ..	3,976,958	4,370,656	4,737,696	5,009,172	5,903,387
Queensland ..	2,868,864	3,157,249	3,452,653	3,886,399	3,823,033
South Australia ..	2,032,784	2,102,928	2,358,733	2,476,119	2,818,846
Western Australia(a) ..	756,826	870,812	1,001,906	2,059,485	2,290,661
Tasmania ..	388,437	429,623	452,072	474,571	1,108,847
Total .. ..	16,390,915	17,270,483	19,035,021	21,683,684	32,880,702

(a) Includes Gold Mining Profits Tax.

(f) *Other taxes on Income.* During 1930-31 special unemployment relief taxes were levied in New South Wales, Victoria and Queensland, but, in the case of New South Wales, this was discontinued and replaced by Special Income and Wages Taxes, which were in turn replaced in 1939-40 by the Unemployment Relief and Social Services Taxes. In 1941-42 these two taxes were abolished, and provision for unemployment relief and social services was made by extending the field and scope of Income Tax. In Queensland the State Development Tax replaced the Unemployment Relief Tax in 1938-39. In South Australia portion of the moneys for expenditure on unemployment relief was raised by an increment in the rate of income tax. A Hospital Tax was levied in Western Australia. The Financial Emergency Tax in that State was abolished as from 1939-40. In Tasmania Special Income and Wages Taxes have provided the funds necessary for the relief of unemployment but, in 1941-42, these taxes were consolidated with Income Tax. Further references to unemployment relief taxation appear in the *Labour Report*, Nos. 22 to 31. The total amounts raised by other taxes on income during the last five years were as follows :—1937-38, £13,333,819; 1938-39, £12,520,718; 1939-40,

£14,415,127; 1940-41, £13,775,377; 1941-42, £3,988,830. The total taxes on income during the same period amounted to £29,724,734, £29,791,201, £33,450,148, £35,459,061 and £36,869,532 respectively.

(g) *Motor Taxation.* Motor taxation comprises tax and registration fees on motor vehicles, and licences of motor dealers, motor drivers and motor cycle riders, and public vehicles except when controlled by local government authorities. The following table shows the collections for the last five years:—

#### MOTOR TAXATION : NET COLLECTIONS.

State.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
New South Wales ..	2,586,811	2,762,678	2,861,342	2,925,307	2,504,095
Victoria.. ..	1,825,152	1,913,689	1,981,509	1,925,430	1,675,256
Queensland ..	818,665	939,757	1,028,247	1,026,911	877,727
South Australia ..	672,635	715,944	687,644	698,117	505,528
Western Australia ..	429,030	453,053	451,037	456,851	374,380
Tasmania ..	147,864	175,591	214,189	214,294	184,682
Total .. ..	6,480,157	6,960,712	7,223,968	7,246,910	6,121,668

The proceeds of motor tax and motor registration fees are now paid into special funds and the amounts do not appear in the Consolidated Revenue Funds, except in the case of South Australia. In Tasmania, prior to 1939-40, motor taxation collections were paid into the Consolidated Revenue Fund, but are now paid to the Transport Commission. The general decline in 1941-42 is due to the falling-off in registrations because of petrol rationing and to the reductions in most States of 20 per cent. or 25 per cent. in registration fees.

(iii) *Business Undertakings.* (a) 1941-42. A very large proportion of State gross revenues is made up of receipts from business undertakings under the control of the Governments. The principal of these are railways and tramways, harbour works, water supply and sewerage and electricity supply, while, in addition, State batteries for the treatment of auriferous ores are included for Western Australia, and various minor revenue-producing services are rendered by the Governments of all States. In this connexion see C. State Finance, § 1, par. 2, page 591. For the year 1941-42 the revenue from these sources was £74,790,687 or 49 per cent. of the revenue from all sources. Details of revenue are as follows:

#### STATE REVENUE FROM BUSINESS UNDERTAKINGS, 1941-42.

Source.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Total.
	£	£	£	£	£	£	£
Railways .. ..	627,686,332	614,179,449	10,444,982	4,857,981	3,898,809	..	61,067,553
Tramways and Omnibuses .. ..	5,429,411	(e)115,428	..	..	402,693	..	5,947,532
Harbours, Rivers, Lights .. ..	1,192,628	(f)190,529	..	632,944	232,202	..	2,248,303
Water Supply, Sewerage, Irrigation and Drainage .. ..	..	702,382	..	1,171,819	940,309	..	2,814,510
Electricity Supply .. ..	..	894,204	..	462,789	462,789	4,648	1,361,641
Other .. ..	(g)519,444	580,958	1,500	83,964	165,282	..	1,351,148
Total .. ..	34,827,815	16,662,950	10,446,482	6,746,708	6,102,084	4,648	74,790,687

(a) Tasmanian transport services are under separate control of Transport Commission.  
 (b) Excludes £800,000 contribution from Consolidated Revenue Fund in respect of losses on country developmental railways.  
 (c) Includes electric tramways operated by the Railways Department.  
 (d) Includes £120,000, portion of Commonwealth Grant paid direct to Railways.  
 (e) Tramway contribution to Consolidated Revenue.  
 (f) Includes Harbour Trust Fund contribution £136,350.  
 (g) Road Transport and Traffic Fund.

(b) 1937-38 to 1941-42. Particulars of the revenue from business undertakings for the last five years are given below :—

## STATE REVENUE FROM BUSINESS UNDERTAKINGS. (a)

Source.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
Railways, Tramways and Omnibuses .. ..	48,639,567	48,154,340	49,256,971	54,892,841	67,015,085
Harbour Services .. ..	2,290,372	2,356,905	2,328,038	2,159,533	2,248,303
Water Supply, Sewerage, Irrigation and Drainage	2,857,242	2,543,046	2,702,474	2,731,412	2,814,510
Other .. ..	2,594,231	2,625,234	2,660,576	2,716,563	2,712,789
<b>Total .. ..</b>	<b>56,381,412</b>	<b>55,679,525</b>	<b>56,948,059</b>	<b>62,500,349</b>	<b>74,790,687</b>

(a) See notes to previous table.

(iv) *Lands.* The revenue from the sale and rental of Crown lands has, with few exceptions, been treated from the earliest times as forming part of the Consolidated Revenue Funds, and has been applied to meet ordinary expenses. The following table gives the revenue from sales and rentals of Crown lands for the year 1941-42 :—

## STATE LAND REVENUE, 1941-42.

Source.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£	£	£	£	£	£	£
Sales ..	89,764	62,008	..	27,917	4,280	1,461	185,430
Conditional Purchases	524,267	..	..	15,944	84,518	5,233	629,962
Rentals ..	821,971	142,906	1,067,625	215,328	60,540	26,074	2,334,444
Forestry ..	196,486	301,391	439,678	..	150,083	40,943	1,128,581
Other ..	41,276	30,126	75,858	8	10,398	3,016	160,682
<b>Total ..</b>	<b>1,673,764</b>	<b>536,431</b>	<b>1,583,161</b>	<b>259,197</b>	<b>309,819</b>	<b>76,727</b>	<b>4,439,099</b>

(v) *Commonwealth Payments.* The payments to the States (including special grants but excluding the contributions in respect of sinking fund on States' Debts and Federal Aid Roads grants which are paid by the Commonwealth into the National Debt Sinking Fund and Federal Aid Roads Trust Fund respectively and certain other grants paid into trust or special accounts) represent in each instance a considerable proportion of the States' revenue, and for the year 1941-42 aggregated £9,884,912 (including £120,000 credited direct to Railway Revenue in South Australia) or 6.5 per cent. of the total revenue of the States. Payments under the Income and Entertainments Tax Reimbursement Acts were not made until the year 1942-43.

(vi) *Interest and Miscellaneous.* In addition to the foregoing, there are in each State several miscellaneous sources of revenue, including such items as interest, fines, fees, etc. In 1941-42 interest, mainly from loans to local governing bodies and on public account balances, was responsible for £5,087,301, whilst "Miscellaneous" revenue which includes fines of the courts and fees for services amounted to £7,647,043.



## Division II.—Expenditure.

1. **General.**—The principal heads of State expenditure from Consolidated Revenue Funds are :—

- (a) Interest, sinking fund and exchange charges in connexion with public debt ;  
 (b) Working expenses of railways, tramways and other business and industrial undertakings ; (c) Education ; (d) Health and charitable expenditure ; (e) Justice ; (f) Police ; (g) Penal establishments ; and (h) All other expenditure, under which heading is included Public Works, Lands and Surveys, Agriculture and Forestry, Legislative and General Administration, Pensions and Miscellaneous.

In earlier years the working expenses of Railways and Tramways were the most important item in Governmental expenditure, but, until recently, Public Debt charges have been the heaviest item. During the last two years, however, Railways and Tramways expenditure has again taken the major place. In the year 1941-42 the percentage represented for Public Debt Charges was 29 as compared with 35 per cent. for Railways and Tramways ; next in importance were Education, 9 per cent. ; Charitable, Public Health and Hospitals, 8 per cent. ; and Law, Order and Public Safety, 5 per cent. The provision for Child Endowment during 1941-42 by the Commonwealth Government relieved the State of New South Wales of an annual expenditure of about £1,400,000. During 1942-43 further relief was afforded to the States by the introduction of the Commonwealth Widows' Pension Scheme.

2. **Total Expenditure.**—The total expenditure from Consolidated Revenue Funds in the several States and the expenditure per head of population during each of the last five years are given in the table hereunder.

## STATE EXPENDITURE : CONSOLIDATED REVENUE FUNDS.

Year.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania. (a)	Total.
	£	£	£	£	£	£	£
1937-38	53,495,881	27,584,037	17,568,223	12,334,391	10,829,735	3,632,903	125,445,170
1938-39	54,163,064	27,772,790	19,316,323	12,700,921	11,170,102	3,640,748	128,763,948
1939-40	57,049,577	28,096,474	20,739,749	12,918,376	11,266,768	3,052,909	133,123,853
1940-41	60,319,036	29,040,357	21,511,313	13,007,598	11,420,957	3,103,204	138,402,465
1941-42	64,824,193	32,320,072	23,599,175	13,712,354	11,938,381	3,357,122	149,751,297

## PER HEAD OF POPULATION.(b)

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1937-38	19 15 0	14 16 6	17 13 2	20 17 5	23 13 11	15 9 2	18 6 4
1938-39	19 16 2	14 16 4	19 3 8	21 7 4	24 2 10	15 7 4	18 12 8
1939-40	20 12 11	14 17 5	20 7 5	21 12 9	24 3 4	12 15 10	19 1 10
1940-41	21 12 8	15 2 5	20 17 6	21 15 1	24 7 8	12 18 6	19 12 10
1941-42	23 0 11	16 10 9	22 16 1	22 13 3	25 9 6	14 0 6	21 0 11

(a) See § 1 par. 2, page 591.

(b) Based on mean population of each financial year.

3. Details of Expenditure, 1941-42.—The following table shows the total expenditure and expenditure per head under each of the principal items:—

## STATE EXPENDITURE : DETAILS, 1941-42.

Particulars.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania. (a)	Total.
	£	£	£	£	£	£	£
Public debt (interest, sinking fund, exchange, etc.) ..	15,583,394	8,796,171	7,067,269	5,371,960	4,591,612	1,353,230	42,763,636
Railways, Tramways and Omnibuses (working expenses)	26,069,804	11,082,482	8,265,486	3,490,993	3,299,514	2,937	52,211,216
Harbours and Rivers, etc. ..	390,763	85,683	..	228,036	45,409	..	749,891
Water Supply, Sewerage, Irrigation and Drainage ..	..	496,681	..	378,807	344,324	..	1,219,812
Other Business and Industrial Undertakings ..	519,444	646,005	4,103	68,487	528,478	..	1,766,517
Education ..	5,882,350	3,237,797	1,849,286	1,078,324	928,995	440,300	13,417,052
Health and charitable	5,510,002	3,124,110	1,702,898	833,157 (b)	467,309	375,625	12,013,101
Justice ..	588,786	286,090	217,147	84,029	89,207	41,327	1,306,586
Police ..	1,430,995	843,567	684,718	318,239	276,660	138,570	3,692,749
Penal establishments	402,500	142,068	47,354	53,896	35,577	23,053	704,448
Public Safety ..	1,273,374	344,669	171,442	11,121	26,591	5,255	1,832,452
All other expenditure	7,172,781	3,234,749	3,589,472	1,795,305	1,304,705	976,825	18,073,837
Total ..	64,824,193	32,320,072	23,599,175	13,712,354	11,938,381	3,357,122	149,751,297

## PER HEAD OF POPULATION.(c)

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Public debt (interest, sinking fund, exchange, etc.) ..	5 10 10	4 10 0	6 16 7	8 17 7	9 16 0	5 13 2	6 0 2
Railways, Tramways and Omnibuses (working expenses)	9 5 4	5 13 5	7 19 9	5 15 6	7 0 10	0 0 3	7 6 9
Harbours and Rivers, etc. ..	0 2 9	0 1 0	..	0 7 6	0 1 11	..	0 2 1
Water Supply, Sewerage, Irrigation and Drainage ..	..	0 5 1	..	0 12 6	0 14 8	..	0 3 5
Other Business and Industrial Undertakings ..	0 3 8	0 6 7	0 0 1	0 2 3	1 2 6	..	0 5 0
Education ..	2 1 10	1 13 2	1 15 9	1 15 8	1 19 8	1 16 9	1 17 8
Health and charitable	1 19 2	1 11 11	1 12 11	1 7 6	0 19 11	1 11 5	1 13 9
Justice ..	0 4 2	0 2 11	0 4 2	0 2 9	0 3 10	0 3 5	0 3 8
Police ..	0 10 2	0 8 7	0 13 3	0 10 6	0 11 10	0 11 7	0 10 5
Penal establishments	0 2 11	0 1 6	0 0 11	0 1 9	0 1 6	0 1 11	0 2 0
Public safety ..	0 9 1	0 3 6	0 3 4	0 0 5	0 1 2	0 0 5	0 5 2
All other expenditure	2 11 0	1 13 1	3 9 4	2 19 4	2 15 8	4 1 7	2 10 10
Total ..	23 0 11	16 10 9	22 16 1	22 13 3	25 9 6	14 0 6	21 0 11

(a) See § 1, par. 2, page 591. (b) In addition £282,747 was expended from Hospital Fund.  
(c) Based on mean population of financial year.

**Division III.—Surplus Revenue.**

The following table shows for each of the years 1937-38 to 1941-42 the amount and amount per head of the surplus or deficit of each State :—

**STATE SURPLUS REVENUE.**

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
1937-38..	49,839	30,945	-228,492	126,545	-10,693	6,852	-25,004
1938-39..	-2,453,329	-787,242	14,046	-397,324	-220,442	-25,984	-3,870,275
1939-40..	-2,294,951	6,261	15,755	-162,728	-146,825	2,401	-2,580,087
1940-41..	-423,465	142,300	28,436	-82,035	11,111	-181,631	-506,184
1941-42..	1,041,485	792,300	63,772	1,269,676	1,768	1,585	3,190,586

**PER HEAD OF POPULATION.(a)**

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1937-38..	0 0 4	0 0 4	0 4 7	0 4 3	0 0 6	0 0 7	0 0 1
1938-39..	0 17 11	0 8 5	0 0 3	0 13 4	0 9 6	0 2 2	0 11 2
1939-40..	0 16 7	..	0 0 4	0 5 6	0 6 4	0 0 3	0 7 5
1940-41..	0 3 1	0 1 6	0 0 7	0 2 9	0 0 5	0 15 2	0 1 5
1941-42..	0 7 5	0 8 1	0 1 2	2 2 8	0 0 2	0 0 1	0 9 8

NOTE.—Minus sign (—) indicates deficit.

(a) Based on mean population of each financial year.

**§ 3. State Trust Funds.**

1. **Nature.**—In addition to the moneys received as revenue and paid to the credit of Consolidated Revenue Funds, considerable sums are held by the State Governments in trust for various purposes. Municipal sinking funds placed in the hands of the Governments are paid to the credit of the appropriate Trust Funds. In all the States, except New South Wales, where the practice is confined to those companies transacting workers' compensation insurance, life assurance companies operating are required to deposit a substantial sum in cash or approved securities with the Government, and these deposits help to swell the trust funds. Various other deposits accounts, superannuation funds, suspense accounts, etc., are also included.

2. **Extent.**—The balances of trust funds held on 30th June, 1942, were as follows :—

**STATE TRUST FUND BALANCES, 30th JUNE, 1942.**

Particulars.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£	£	£	£	£	£	£
Amount of trust funds	18,213,426	12,775,345	5,392,115	1,714,703	5,515,999	1,014,265	44,625,853

(a) Special Deposits Account and Special Accounts.

**§ 4. State Loan Funds.****Division I.—Loan Expenditure.**

1. **General.**—As far back as 1842 revenue collections were supplemented by borrowed moneys, the earliest loan being raised by New South Wales for the purpose of assisting immigration, at rates of interest varying from 2½d. to 5½d. per £100 per diem, or approximately from 4½ per cent. to 8 per cent. per annum. Australian public



borrowing, however, is mainly due to the fact that the State Governments, in addition to ordinary administrative duties, undertake functions which in other countries are usually entrusted to local authorities or left to private enterprise. Foremost amongst these are the construction and control of the railway systems, but loan moneys have been largely used for improvements to harbours and rivers, and for the construction of roads, water supply and sewerage works. The State loan expenditure and public debt thus differ very materially from those of most European countries, and from those of the Commonwealth, where such expenditure was very largely incurred for defence or war purposes. As shown above, the State debts consist chiefly of moneys raised and expended with the object of assisting the development of the resources of the country, and are to a very large extent represented by tangible assets.

Statements relating to Loan Expenditure are given below for both "gross" and "net" expenditure. The gross expenditure represents the amounts disbursed during each year whereas the net expenditure represents the gross expenditure less any credits to the Loan Fund during the year on account of repayments of advances to local governing bodies, settlers, etc., the sale of assets and transfers from other funds. Such moneys are credited to the Loan Fund in the year of repayment irrespective of when the advance was made.

2. Loan Expenditure, 1941-42.—(a) *Gross Loan Expenditure, 1941-42.* Particulars of the gross loan expenditure on Works, Services, etc., for the year 1941-42 are given in the following table:—

STATE GROSS LOAN EXPENDITURE ON WORKS, SERVICES, ETC., 1941-42.

Heads of Expenditure.	N.S.W.	Victoria. (a)	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
<b>Public Works and Services—</b>							
Railways ..	2,242,500	740,271	634,189	371,093	20,899	285,607	4,305,459
Tramways and Omnibuses ..	5,653	..	..	..	29,857	..	35,510
Roads ..	679,701	2,570	381,254	..	..	..	1,061,525
Bridges ..	..	..	..	..	..	..	..
Harbours and Rivers ..	156,046	..	20,618	..	100,419	43,787	1,416,318
Lights and Lighthouses ..	..	..	..	31,923	..	..	..
Water Supply ..	..	274,845	305,000	884,588	136,306	..	1,845,778
Sewerage ..	101,573	..	..	71,112	..	..	..
Electricity Supply ..	162,501	..	..	22,578	..	..	782,079
Public Buildings ..	495,084	442,514	320,061	72,105	35,289	597,000	1,483,087
Loans and Grants to	..	..	..	..	..	..	..
Local Bodies ..	84,547	..	790,884	..	..	..	875,431
Unemployment Relief	..	..	..	..	..	..	..
Works ..	..	104,897	..	..	..	3,832	108,729
Housing ..	201	..	3,047	200,000	..	145,897	350,048
Other Public Works, etc.	101,741	..	276,772	97,441	690	65,415	542,059
<b>Primary Production—</b>							
Soldier Settlement ..	..	..	2,644	8,192	8	377,825	515,049
Land for Settlement ..	(b) 107	..	102,460	..	2,206	21,607	..
Advances to Settlers ..	..	917	6,892	105,598	140	95,698	209,245
Water Conservation ..	..	..	..	14,885	7,164	..	749,779
Irrigation and Drainage	583,493	..	8,425	6,748	129,064	..	..
Rabbit-proof Fencing ..	..	1,008	..	229	..	..	1,237
Agriculture(c) ..	..	..	..	..	..	..	45,627
Agricultural Bank ..	5,269	..	24,900	..	40,358	..	24,900
Forestry ..	..	285,827	44,171	261,089	16,557	..	937,644
Mines and Mineral Re-	..	..	..	..	..	..	..
sources ..	..	15,560	9,717	..	56,872	..	82,149
Other ..	..	..	..	..	..	34,615	34,615
Other Purposes ..	..	2,379	..	215,000	141,568	..	358,947
<b>Total Public Works, Ser-</b>							
<b>vices, &amp;c., Expenditure</b>	4,618,119	1,870,788	2,931,934	2,342,145	850,087	1,790,317	14,103,690
<b>Per Head of Population</b>	£1 12 10	£0 19 2	£2 16 8	£3 17 5	£1 16 3	£7 9 7	£2 0 6

(a) Expenditure from Loan Funds and on account of Loans, includes expenditure from Loan Funds, from Treasurer's Advance Account, and from State Loans Repayment Fund. (b) Includes Rabbit-proof Fencing Advances. (c) Includes Grain Elevators, New South Wales.

(b) *Net Loan Expenditure, 1941-42.* For the year ended 30th June, 1942, State net loan expenditure on Works, Services, etc., was as follows:—

### STATE NET LOAN EXPENDITURE ON WORKS, SERVICES, ETC., 1941-42.

Heads of Expenditure.	N.S.W.	Victoria. (a)	Q'land.	S. Aust. (b)	W. Aust.	Tasmania.	Total.
Public Works and Services—	£	£	£	£	£	£	£
Railways .. ..	1,680,050	730,894	95,345	344,673	25,304	40,109	2,916,465
Tramways and Omnibuses ..	Cr. 198,239	..	..	c Cr. 52,744	29,857	..	Cr. 221,126
Roads .. ..	606,611	{ Cr. 25,405 }	321,955	Cr. 16,000	Cr. 13	..	..
Bridges .. ..	..	Cr. 3,279	..	..	..	..	..
Harbours and Rivers .. ..	124,655	Cr. 4,733	20,187	16,020	{ 55,668 }	40,955	1,136,921
Lights and Lighthouses ..	..	..	..	..	..	..	..
Water Supply .. ..	Cr. 36,669	{ 268,589 }	305,000	868,715	130,565	..	1,625,317
Sewerage .. ..	..	Cr. 1,038	..	52,795	37,960	..	..
Electricity Supply .. ..	151,853	..	..	..	12,578	512,242	676,673
Public Buildings .. ..	487,080	441,837	314,055	71,732	35,042	115,700	1,465,446
Loans and Grants to Local Bodies .. ..	83,936	Cr. 2,936	381,151	Cr. 1,653	Cr. 558	Cr. 32,766	427,174
Unemployment Relief Works .. ..	Cr. 148,225	Cr. 67,163	..	..	..	Cr. 10,738	Cr. 226,126
Housing .. ..	195	..	Cr. 92,934	Cr. 77,521	Cr. 3,007	88,512	Cr. 84,755
Other Public Works, etc.	76,741	..	276,772	58,217	690	54,403	466,823
Primary Production—							
Soldier Settlement .. ..	{ (d) 36 }	Cr. 416,011	{ Cr. 39,475 }	Cr. 58,802	Cr. 51,327	Cr. 96,584	Cr. 606,846
Land for Settlement .. ..	..	..	66,751	Cr. 20,537	1,070	Cr. 1,780	..
Advances to Settlers .. ..	..	Cr. 34,892	7,389	Cr. 100,233	10	Cr. 29,811	Cr. 172,345
Water Conservation .. ..	..	..	..	12,807	6,883	..	..
Irrigation and Drainage ..	484,743	{ .. }	Cr. 7,901	{ 1,247 }	127,139	..	624,918
Rabbit-proof Fencing .. ..	..	Cr. 13,835	Cr. 19,707	Cr. 11,953	..	..	Cr. 45,495
Agriculture (e) .. ..	Cr. 154,736	..	Cr. 2,221	..	39,139	..	Cr. 117,818
Agricultural Bank .. ..	..	..	Cr. 10,002	..	..	..	Cr. 10,002
Forestry .. ..	..	220,578	44,000	20,647	46,557	..	331,782
Mines and Mineral Resources .. ..	..	9,854	2,046	..	51,642	..	63,542
Other .. ..	..	Cr. 6,619	Cr. 72,837	Cr. 2,426	Cr. 21	34,615	Cr. 47,288
Other Purposes .. ..	..	2,379	Cr. 46	125,584	133,552	..	261,469
Total Public Works, Services, &c., Expenditure .. ..	3,158,031	1,097,620	1,584,053	1,230,478	679,720	714,827	8,464,729
Per Head of Population .. ..	£1 2 5	£0 11 3	£1 10 7	£2 0 8	£1 9 0	£2 19 9	£1 3 10

(a) Expenditure from Loan Funds and on account of Loans, includes expenditure from Loan Funds, from Treasurer's Advance Account, and from State Loans Repayment Fund. (b) Credits arising from the cancellation of securities redeemed from Sinking Fund not allowed for. (c) Loans to Metropolitan Tramways Trust. (d) Includes Rabbit-proof Fencing advances. (e) Includes Grain Elevators, New South Wales and Victoria.

3. *Net Loan Expenditure on Works, Services, etc., 1937-38 to 1941-42.*—The following table gives the works net loan expenditure during each of the years 1937-38 to 1941-42:—

### STATE NET LOAN EXPENDITURE ON WORKS, SERVICES, ETC.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
1937-38	5,100,865	2,345,460	2,224,934	1,133,054	2,160,480	850,305	13,815,098
1938-39	5,407,856	2,289,535	2,041,588	1,226,096	1,636,184	576,627	13,177,886
1939-40	5,886,266	3,141,711	2,608,727	950,166	1,812,079	852,911	15,251,860
1940-41	4,342,580	1,738,991	2,222,626	1,606,727	1,409,314	864,428	12,184,666
1941-42	3,158,031	1,097,620	1,584,053	1,230,478	679,720	714,827	8,464,729

### PER HEAD OF POPULATION.

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1937-38	1 17 8	1 5 3	2 4 9	1 18 4	4 14 7	3 12 4	2 0 4
1938-39	1 19 7	1 4 5	2 0 7	2 1 3	3 10 9	2 8 8	1 18 2
1939-40	2 2 7	1 13 3	2 11 3	1 11 10	3 17 9	3 11 6	2 3 9
1940-41	1 11 2	0 18 1	2 3 2	2 13 9	3 0 2	3 12 0	1 14 7
1941-42	1 2 5	0 11 3	1 10 7	2 0 8	1 9 0	2 19 9	1 3 10

The loan expenditure per head of population was at its highest point for the five years under review in 1939-40 with £2 3s. 9d. per head, and at its lowest in 1941-42 with £1 3s. 10d. per head.

4. Total Net Loan Expenditure to 30th June, 1942.—The total net loan expenditure including revenue deficits, etc., of the States from the initiation of borrowing to 30th June, 1942, amounted to £1,038,379,833. The purposes for which this sum was expended are shown in the following table :—

## TOTAL STATE NET LOAN EXPENDITURE TO 30th JUNE, 1942.

Heads of Expenditure.	N.S.W.	Victoria.(a)	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
<b>Public Works and Services—</b>							
Railways ..	155,590,757	78,236,053	66,222,708	35,468,206	25,706,927	7,410,549	368,635,200
Tramways and Omnibuses ..	8,713,172	..	..	(b) 3,661,671	1,277,991	..	13,652,834
Roads and Bridges ..	20,932,552	12,645,199	5,308,527	3,875,145	3,183,327	..	95,605,668
Harbours, Rivers, Lighthouses ..	22,171,515	1,404,535	2,833,748	8,484,266	7,519,616	7,247,238	109,990,686
Water Supply ..	40,895,486	31,579,213	1,631,741	17,109,833	10,693,041	..	29,247,599
Sewerage ..	2,476,492	217,784	..	3,705,458	4,153,130	..	42,740,833
Electricity Supply ..	17,550,069	17,839,227	..	..	1,863,233	7,068,647	22,967,889
Public Buildings ..	..	8,024,826	7,297,763	4,243,616	2,757,005	2,867,554	..
Loans and Grants to Local Bodies ..	1,695,563	1,626,377	18,985,133	20,336	92,396	548,084	30,769,869
Unemployment Relief Works ..	17,291,341	13,123,464	..	..	(c) 355,064	..	14,062,456
Housing ..	1,937,753	1,190,000	3,762,664	5,829,735	802,877	539,427	6,756,082
Commonwealth Services ..	3,965,937	149,323	524,388	1,283,387	332,293	500,754	13,229,426
Other Public Works and Services (d) ..	3,940,601	702,989	3,080,258	990,405	1,846,556	2,668,617	..
<b>Primary Production—</b>							
Closer Settlement ..	8,309,071	..	(e) 884,274	..	8,532,545	428,307	87,670,301
Land for Settlement ..	4,018,847	41,570,934	3,332,879	1,524,830	324,662	..	..
Soldier Settlement ..	..	..	1,130,240	8,366,582	6,883,154	2,354,976	7,248,898
Advances to Settlers ..	..	2,486,197	294,162	2,115,748	2,063,027	289,764	..
Water Conservation ..	..	..	..	4,332,716	1,340,691	..	34,557,981
Irrigation and Drainage ..	19,480,008	..	1,992,913	4,899,852	2,511,801	..	..
Rabbit Proof Fencing ..	..	879,645	280,257	172,440	341,765	..	1,674,107
Agriculture (g) ..	7,238,200	1,150,682	51,566	..	3,828,062	..	12,268,510
Agricultural Bank ..	..	..	1,725,497	..	5,878,695	..	7,604,192
Forestry ..	..	1,462,721	1,311,786	1,315,426	1,007,597	..	5,097,530
Mines and Mineral Resources ..	580,687	584,943	2,074,793	..	2,930,665	..	6,171,088
Other ..	..	1,097,262	2,782,188	771,221	88,560	34,615	4,773,846
Other Purposes ..	89,283	211,627	424,009	(h) 4,198,013	3,535,714	..	8,458,646
<b>Total Public Works, Services, &amp;c., Expenditure ..</b>	<b>336,877,334</b>	<b>216,183,001</b>	<b>125,940,494</b>	<b>112,368,886</b>	<b>99,500,330</b>	<b>32,313,596</b>	<b>923,183,641</b>
<b>Other than Works, &amp;c.—</b>							
Discounts and Flotation Expenses ..	17,814,141	5,834,340	6,175,368	1,226,387	4,095,750	(i) ..	35,145,986
Revenue and General Cash Deficits ..	42,830,007	4,863,682	5,826,271	9,251,580	12,104,519	1,016,997	75,893,056
Treasury Bills Retired ..	..	..	2,857,150	..	..	..	2,857,150
Other ..	..	..	(j) 1,300,000	..	..	..	1,300,000
<b>Grand Total ..</b>	<b>397,521,182</b>	<b>226,881,023</b>	<b>142,099,283</b>	<b>122,846,853</b>	<b>115,700,599</b>	<b>33,330,593</b>	<b>1,038,379,833</b>

(a) Aggregate Gross Loan Expenditure. (b) Loans to Metropolitan Tramways Trust. (c) Not available separately. (d) Distributed under various particular headings. (e) Includes Industrial Undertakings and Immigration. (f) Under Prickly Pear Land Act. (g) Includes Grain Elevators New South Wales and Victoria. (h) Includes £2,960,505 State Bank. (i) Included with Other Public Works. (j) Contribution to Sinking Fund.

The figures in the foregoing table show the amounts actually spent, and differ from those given later in the statements relating to the public debt, which represent the amount of loans still unpaid. The statement above includes all expenditure, whether the loans have been repaid or are still in existence. As in the earlier tables on net loan expenditure,



allowance has been made, however, for credits on account of repayments of advances to local government bodies, settlers, etc., the sale of assets and transfers from other funds. In the public debt statement, on the other hand, loans repaid are not included, and in the case of loans still outstanding, each is shown according to the amount repayable at maturity, and not according to the amount originally available for expenditure.

5. Total Loan Expenditure, 1940-41 and 1941-42.—The following table gives particulars, in summary form, of the total loan expenditure in each State during each of the years 1940-41 and 1941-42 :—

STATE LOAN EXPENDITURE, SUMMARY, 1940-41 AND 1941-42.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
1940-41.							
Works and Services—							
Gross Expenditure ..	5,361,838	2,734,442	3,257,358	2,607,631	1,536,338	1,845,921	17,343,528
Net Expenditure ..	4,342,580	1,738,991	2,222,626	1,606,727	1,409,314	864,428	12,184,666
Repayments ..	1,019,258	995,451	1,034,732	1,000,904	127,024	981,493	5,158,862
Other than Works—(a)							
Gross Expenditure ..	63,286,106	15,350	106,226	162,728	9,238	269,631	3,849,279
Net Expenditure ..	2,736,106	15,350	Cr. 33,774	162,728	Cr. 2,738	269,631	3,127,303
Repayments ..	550,000	..	160,000	..	11,976	..	721,976
Total Loan Expenditure—							
Gross ..	8,647,944	2,749,792	3,363,584	2,770,359	1,545,576	2,115,552	21,192,807
Net ..	7,078,080	1,754,341	2,168,852	1,769,455	1,406,570	1,134,059	15,311,960
Repayments ..	1,569,258	995,451	1,194,732	1,000,904	139,000	981,493	5,880,838
1941-42.							
Works and Services—							
Gross Expenditure ..	4,618,419	1,870,788	2,931,934	2,342,145	850,087	1,790,317	14,403,690
Net Expenditure ..	3,158,031	1,097,620	1,584,053	1,230,478	679,720	714,827	8,464,729
Repayments ..	1,460,388	773,168	1,347,881	1,111,667	170,367	1,075,490	5,938,961
Other than Works—(a)							
Gross Expenditure—							
Discounts and Flotation							
Expenses ..	99,896	63,742	598,422	17,671	8,585	..	788,316
Revenue and General							
Cash Deficits ..	5,000	..	..	82,936	..	..	87,936
Other ..	..	..	(c) 100,000	..	..	..	100,000
Total ..	104,896	63,742	698,422	100,607	8,585	..	976,252
Net Expenditure—							
Discounts and Flotation							
Expenses ..	99,896	63,742	439,545	17,671	7,720	..	628,574
Revenue and General							
Cash Deficits ..	Cr. 391,976	..	..	82,936	Cr. 1,768	..	Cr. 310,808
Other ..	..	..	(c) 100,000	..	..	..	100,000
Total ..	Cr. 292,080	63,742	539,545	100,607	5,952	..	417,766
Repayments ..	(d) 396,976	..	158,877	..	2,633	..	558,486
Total Loan Expenditure—							
Gross ..	4,723,315	1,934,530	3,630,356	2,442,752	858,672	1,790,317	15,379,942
Net ..	2,865,951	1,161,362	2,123,598	1,331,085	685,672	714,827	8,882,495
Repayments ..	1,857,304	773,168	1,506,758	1,111,667	173,000	1,075,490	6,497,447

(a) Includes exchange, discounts and flotation expenses, revenue and general cash deficits.  
£1,895,440 available towards funding deficits.

(c) Contribution to Sinking Fund.

(b) Includes  
(d) Re-allocation

to Works and Services of amount allocated in earlier years for deficiency purposes.

## Division II.—State Public Debts.

1. **General.**—The first government loan raised in Australia was obtained by New South Wales in 1842. This and nine other loans prior to 1855 were all raised locally. In the last-mentioned year New South Wales approached the London market for the first instalment of a 5 per cent. loan for £683,300. Victoria first appeared as a borrower in 1854, and made its first appearance on the London market in 1859. The first public loans were raised by the other States in the following years:—Queensland 1861, South Australia 1856, Western Australia 1845, and Tasmania 1867.

2. **State Debts, 1938 to 1942.**—The table hereunder shows the State public debts and the amounts owing per head of population at 30th June in each year from 1938 to 1942 inclusive.

As provided in the Financial Agreement (references to which are given on page 617), the Commonwealth Government on 1st July, 1929, assumed the liabilities of the States to bondholders in respect of the debts of the States existing at 1st July, 1929, and taken over by the Commonwealth. Reference is made in Chap. IV. "Land Tenure and Settlement" to certain remissions which the Commonwealth Government made to the States on account of losses sustained by the States in connexion with soldier land settlement; the States' debts were so reduced by £5,000,000 as from 1st October, 1925, and by a further £2,597,783 as from 30th June, 1927. The following figures represent the total "face" or "book" values of the debts of the States leaving out of account currency changes since the loans were floated:—

## STATE PUBLIC DEBTS.

Date.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
30th June, 1938	354,167,254	177,228,406	125,781,564	107,450,630	93,711,942	25,840,807	884,180,702
" 1939	330,843,000	179,608,118	127,503,251	108,887,002	95,472,000	26,300,900	867,772,041
" 1940	303,325,538	180,540,008	120,033,227	109,344,040	90,230,399	27,243,802	905,727,004
" 1941	308,074,948	181,219,188	130,004,003	109,779,725	97,791,724	28,101,858	916,022,046
" 1942	300,502,810	177,716,484	131,171,752	109,190,225	97,350,244	28,737,388	910,077,012

## PER HEAD OF POPULATION. (a)

	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
30th June, 1938	130	5	3	94	18	0	125	7	8	181	8	3	203	13	0	110	6	11
" 1939	131	0	0	95	10	3	125	8	8	182	15	4	205	2	7	111	8	4
" 1940	130	18	4	94	16	11	125	14	8	182	15	0	205	13	8	113	17	0
" 1941	131	18	4	93	9	10	125	10	2	183	2	9	208	11	10	117	19	5
" 1942	129	11	4	90	5	3	126	7	7	179	10	3	206	10	6	110	15	5

(a) Based on population at 30th June in each year.

The public debt of the whole of the States increased during the period under review by nearly £26.5 million or at the average rate of over £6.6 million per annum. The debt per head of population decreased, however, during the period by £1 5s. 8d. to £127 0s. 3d. per head. During 1941-42 the total State debt decreased by nearly £5.4 million, a decline of £2 1s. 0d. per head of population. In some States certain public functions such as Tramways, Water Supply and Sewerage, and Harbour Services, etc., are controlled by Boards or Trusts which, in addition to receiving advances from the Central Government, raise loans by public borrowing on their own behalf, while in other States these services are controlled by the Central Governments. Comparison of the debts of the States is therefore difficult, but on page 617 figures showing the aggregate debts of the States including these local and semi-governmental bodies are given for the years 1939-40 and 1940-41.

3. Place of Flotation of Loans.—Early loans, usually for comparatively small amounts, were raised locally, but, with the increasing demand for loan funds and the more favourable terms offering in the London market, the practice of raising loans in London came into vogue, and for many years local flotations, except for short terms or small amounts, were comparatively infrequent. In more recent years, however, the accumulating stocks of money in Australia seeking investment have led to the placing or various redemption and other loans locally, with very satisfactory results. Loans have also been placed in New York on account of all States. The following table gives particulars of loans outstanding on 30th June, 1942, which had been floated abroad and in Australia respectively :—

**STATE PUBLIC DEBTS, 30th JUNE, 1942 : PLACE OF FLOTATION OF LOANS.**

State.	Maturing Overseas.			Maturing in Australia.	Grand Total.
	London.	New York.	Total Overseas.		
"	£ Stg.	£(a)	£(b)	£ Aust.	£(b)
New South Wales	155,517,949	12,069,866	167,587,815	198,915,004	366,502,819
Victoria ..	62,050,453	4,498,878	66,549,331	111,167,153	177,716,484
Queensland ..	62,788,171	5,270,944	68,059,115	63,112,637	131,171,752
South Australia..	42,849,806	1,733,468	44,583,274	64,606,951	109,190,225
Western Australia	43,863,753	2,015,436	45,879,189	51,480,055	97,359,244
Tasmania ..	13,352,087	227,796	13,579,883	15,157,505	28,737,388
Total ..	380,422,219	25,816,388	406,238,607	504,439,305	910,677,912

**PER HEAD OF POPULATION.**

	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (b)	£ s. d. (Aust.)	£ s. d. (b) -
New South Wales	54 19 7	4 5 4	59 4 11	70 6 5	129 11 4
Victoria ..	31 10 4	2 5 8	33 16 0	56 9 3	90 5 3
Queensland ..	60 9 10	5 1 7	65 11 5	60 16 2	126 7 7
South Australia ..	70 11 3	2 17 2	73 8 5	106 7 10	179 16 3
Western Australia	93 4 11	4 5 9	97 10 8	109 8 10	206 19 6
Tasmania ..	55 13 0	0 19 0	56 12 0	63 3 5	119 15 5
Total ..	53 3 8	3 12 2	56 15 10	70 10 5	127 6 3

(a) Payable in terms of dollars. For the purposes of these tables dollars have been arbitrarily converted to £Stg. at the rate of \$4.8665 to £1. (b) Total "face" or "book" value of the debt of each State without adjustment on account of currency changes since the loans were floated.

Particulars of the aggregate debts of the States for the last five years showing the amounts which will mature overseas and in Australia respectively will be found on page 615.



4. Interest.—(i) *Amounts Payable and Average Rate.* The highest rate of interest paid for the earliest State loans was 5½d. per £100 per diem, or, approximately, 8 per cent. per annum. At present the rates vary from 6 per cent. to 1½ per cent., thirty-three separate rates being involved. The average rate payable on the aggregate indebtedness is £3 12s 7d. per cent. For the separate States the average varies, being lowest for New South Wales (£3 10s. 3d.) and highest for Queensland (£3 16s. 0d.). The following table gives particulars of the amount of interest payable, together with the average rate of interest payable at 30th June, 1942, with separate information for London, New York and Australian maturities. The units of currency in this and other Public Debt tables are—for debts maturing and interest payable—

in Australia .. £ Australian.

in London .. £ Sterling.

in New York .. Payable in terms of dollars. See note (a) p. 608.

## STATE PUBLIC DEBTS, 30th JUNE, 1942 : INTEREST PAYABLE.

## WHERE PAYABLE.

State.	Overseas.			Australia.	Grand Total.
	London.	New York.	Total.		
	£ Stg.	£	£	£ Aust.	£
New South Wales	5,820,994	584,030	6,405,024	6,466,537	12,871,561
Victoria ..	2,315,689	221,140	2,536,829	4,040,566	6,577,395
Queensland ..	2,513,322	278,971	2,792,293	2,189,590	4,981,883
South Australia	1,674,369	86,674	1,761,043	2,308,535	4,069,578
Western Australia	1,684,035	100,771	1,784,806	1,744,487	3,529,293
Tasmania ..	491,936	11,390	503,326	534,049	1,037,375
Total ..	14,500,345	1,282,976	15,783,321	17,283,764	33,067,085

## AVERAGE RATE PAYABLE.

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	3 14 10	4 16 9	3 16 5	3 5 0	3 10 3
Victoria ..	3 14 8	4 18 4	3 16 3	3 12 8	3 14 0
Queensland ..	4 0 1	5 5 10	4 2 1	3 9 5	3 16 0
South Australia	3 18 2	5 0 0	3 19 0	3 11 6	3 14 6
Western Australia	3 16 9	5 0 0	2 17 10	3 7 9	3 12 6
Tasmania ..	3 13 8	5 0 0	3 14 2	3 10 5	3 12 2
Total ..	3 16 3	4 19 5	3 17 8	3 8 6	3 12 7

The average rate for debt maturing in Australia has been reduced from £5 4s. 11d. per cent. in 1931 to £3 8s. 6d. per cent. in 1942. For debt maturing in London the average rate increased from £4 12s. 7d. per cent. in 1931 to £4 13s. 3d. in 1932, but, as a result of the conversions effected in London, fell to £3 16s. 3d. in 1942, while for New York loans decreased from £5 2s. 6d. per cent. in 1931 to £4 19s. 5d. in 1942.

(ii) *Indebtedness at each Rate.* The following table shows, for the combined States, particulars of the total debt at each rate of interest and according to place of maturity. The totals given represent the total "face" or "book" values of the debts of the States without adjustment on account of currency changes since the loans were floated, and the nominal amount (and average rate) of interest payable, taking no account of exchange :—

STATE PUBLIC DEBTS : AMOUNTS AT EACH RATE OF INTEREST PAYABLE, AT  
30th JUNE, 1942.

Rate of Interest.	Maturing in—			
	London.	New York.	Australia.	Total.
%	£ (Stg.)	£ (Stg.)	£ (Aust.)	£
6.0	..	2,054,865	..	2,054,865
5.25	17,870,500	..	..	17,870,500
5.0375	..	..	500,010	500,010
5.0	79,239,072	18,082,948	..	97,322,020
4.65	..	..	755,000	755,000
4.5	..	5,678,575	..	5,678,575
4.2625	..	..	1,486,857	1,486,857
4.06875	..	..	1,346,700	1,346,700
4.0	58,504,844	..	118,915,354	177,420,198
3.95833	..	..	4,061,000	4,061,000
3.95417	..	..	1,875,750	1,875,750
3.89167	..	..	50,000	50,000
3.875	..	..	69,571,578	69,571,578
3.8125	..	..	200,000	200,000
3.79167	..	..	6,370,000	6,370,000
3.75	24,649,682	..	67,942,551	92,592,233
3.72917	..	..	350,000	350,000
3.625	..	..	5,422,680	5,422,680
3.5	100,697,308	..	22,633,005	123,330,313
3.4875	..	..	6,138,195	6,138,195
3.375	..	..	18,071,740	18,071,740
3.25	18,123,412	..	79,200,960	97,324,372
3.125	..	..	173,230	173,230
3.1	..	..	4,699,457	4,699,457
3.0	42,000,714	..	31,403,690	73,404,404
2.90625	..	..	5,100	5,100
2.75	16,179,597	..	3,592,020	19,771,617
2.7125	..	..	887,281	887,281
2.5	..	..	11,851,900	11,851,900
2.325	..	..	1,851,937	1,851,937
2.25	21,663,840	..	..	21,663,840
2.0	1,491,000	..	..	1,491,000
1.5	..	..	45,083,000	45,083,000
Overdue	2,250	..	310	2,560
Total Debt	380,422,219	25,816,388	504,439,305	910,677,912

(iii) *Variations from 1901 to 1942.*—The variations in the rates of interest payable on the public debts of the States are shown in the following table which gives the percentages of the total debts in various interest groups during the years specified, and the average rate of interest in each year:—

## STATE PUBLIC DEBTS : PERCENTAGES, ETC., IN VARIOUS INTEREST GROUPS.

Interest Rates.	Percentage of Total Debt at 30th June—						
	1901.	1911.	1921.	1931.	1940.	1941.	1942.
	%	%	%	%	%	%	%
Not exceeding 3 per cent. . .	18.0	17.9	10.2	5.3	17.8	18.5	19.4
Exceeding 3 per cent. but not exceeding 4 per cent. . .	78.5	81.9	45.4	17.2	64.0	63.6	66.7
Exceeding 4 per cent. but not exceeding 5 per cent. . .	3.1	0.1	15.6	36.8	15.7	15.5	11.7
Exceeding 5 per cent. but not exceeding 6 per cent. . .	0.4	0.1	23.5	38.4	2.3	2.2	2.2
Exceeding 6 per cent. . .	..	..	5.3	2.3	0.2	0.2	..
Total . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average Rate of Interest Payable . . .	3.7	3.6	4.4	4.9	3.7	3.7	3.6

5. *Dates of Maturity.*—Securities like the British Consols are interminable, but Australian debts have in most cases a fixed date for repayment, there being a few exceptions which are included in the following table under the headings “interminable”, “Treasurer’s option”, and “indefinite”. Those terminable at “Treasurer’s option” include amounts which are payable by the respective Governments after giving a specified notice, and those “indefinite” consist of certain amounts owing to the Commonwealth Government. Generally, renewal is effected at date of maturity in respect of the greater portion of the loan. In order to avoid application to the market at an unfavourable time, the practice has been adopted of specifying a period prior to the date of maturity within which the Government, on giving twelve, or in some cases six months’ notice, has the option of redeeming the loan. The Government can, therefore, take advantages of opportunities that may offer during the period for favourable renewals. Particulars concerning the due dates of latest maturity of the State loans outstanding on 30th June, 1942, are given in the following table, the various maturities being grouped according to years ending 30th June.

## STATE PUBLIC DEBTS, 30th JUNE, 1942 : LATEST DATES OF MATURITY.

Year of Maturity.	Maturing in—			
	London.	New York.	Australia.	Total.
	£ (stg.)	£ (stg.)	£ (Aust.)	£
1942-43 . . . . .	41,057,937	..	77,591,517	118,649,454
1943-44 . . . . .	4,596,400	..	25,257,230	29,853,630
1944-45 . . . . .	12,111,908	..	32,643,023	44,754,931
1945-46 . . . . .	..	..	9,571,800	9,571,800
1946-47 . . . . .	5,673,713	2,054,865	11,728,828	19,457,406
1947-48 . . . . .	..	..	18,131,309	18,131,309
1948-49 . . . . .	38,474,186	..	26,882,985	65,357,171
1949-50 . . . . .	6,055,545	..	24,502,869	30,558,414
1950-51 . . . . .	20,454,078	..	15,893,008	36,347,086
1951-52 . . . . .	..	..	25,732,906	25,732,906
1952-53 . . . . .	11,789,758	..	491,717	12,281,475
1953-54 . . . . .	16,526,691	..	14,900,857	31,427,548
1954-55 . . . . .	3,204,904	..	41,729,788	44,934,692
1955-56 . . . . .	..	10,471,733	35,920,821	46,392,554
1956-57 . . . . .	..	4,066,475	27,265,865	31,332,340
1957-58 . . . . .	38,171,400	9,223,315	55,074,659	103,069,374
1958-59 . . . . .	21,083,600	..	7,902,237	28,985,837
1959-60 . . . . .	3,779,524	..	15,018,633	18,798,157
1960-61 . . . . .	9,417,718	..	2,802,850	12,220,568



STATE PUBLIC DEBTS, 30th JUNE, 1942: LATEST DATES OF MATURITY—  
*continued.*

Year of Maturity.	Maturing in—			
	London.	New York.	Australia.	Total.
	£ (stg.)	(£ stg.)	£ (Aust.)	£
1961-62 .. .. .	4,866,583	..	14,075,010	18,941,593
1962-63 .. .. .	10,283,396	..	718,433	11,001,829
1963-64 .. .. .	..	..	2,611,201	2,611,201
1964-65 .. .. .	..	..	526,247	526,247
1965-66 .. .. .	14,055,000	..	..	14,055,000
1966-67 .. .. .	24,022,000	..	938,378	24,960,378
1969-70 .. .. .	1,920,650	..	..	1,920,650
1970-71 .. .. .	11,545,722	..	..	11,545,722
1974-75 .. .. .	13,603,528	..	..	13,603,528
1975-76 .. .. .	65,183,072	..	50,064	65,233,136
Overdue .. .. .	2,250	..	2,820	5,070
Interminable .. ..	1,000	..	..	1,000
Treasurer's option ..	2,397,148	..	..	2,397,148
Half-yearly drawings ..	144,508	..	5,360,908	5,505,416
Indefinite .. .. .	..	..	10,513,342	10,513,342
Total .. .. .	380,422,219	25,816,388	504,439,305	910,677,912

Particulars of the State Public Debts according to the year of earliest maturity are shown hereunder :—

## STATE PUBLIC DEBTS, 30th JUNE, 1942 : EARLIEST DATES OF MATURITY.

Year of Maturity.	Maturing in—			
	London.	New York.	Australia.	Total.
	£ (stg.)	£ (stg.)	£ (Aust.)	£
Before 1942-43 .. ..	63,652,634	8,177,233	..	71,829,867
1942-43 .. .. .	35,161,736	..	77,591,517	112,753,253
1943-44 .. .. .	25,374,299	..	25,257,230	50,631,529
1944-45 .. .. .	3,958,800	..	32,643,023	36,601,823
1945-46 .. .. .	95,320,921	..	15,911,690	111,232,611
1946-47 .. .. .	..	2,054,865	6,999,938	9,054,803
1947-48 .. .. .	17,870,500	5,112,557	16,520,309	39,503,366
1948-49 .. .. .	10,900,772	..	26,882,985	37,783,757
1949-50 .. .. .	7,976,195	..	24,502,869	32,479,064
1950-51 .. .. .	22,585,823	..	91,412,008	113,997,831
1951-52 .. .. .	..	..	25,732,906	25,732,906
1952-53 .. .. .	..	4,793,157	41,443,427	46,236,584
1953-54 .. .. .	21,083,600	..	36,600,467	57,684,067
1954-55 .. .. .	20,300,900	..	778,078	21,078,978
1955-56 .. .. .	16,065,605	5,678,576	14,221,211	35,965,392
1956-57 .. .. .	..	..	596,685	596,685
1957-58 .. .. .	..	..	14,178,849	14,178,849
1958-59 .. .. .	..	..	548,227	548,227
1959-60 .. .. .	..	..	15,018,633	15,018,633
1960-61 .. .. .	..	..	2,802,850	2,802,850
1961-62 .. .. .	24,022,000	..	14,075,010	38,097,010
1962-63 .. .. .	..	..	718,433	718,433
1963-64 .. .. .	..	..	2,611,201	2,611,201
1964-65 .. .. .	13,603,528	..	526,247	14,129,775
1966-67 .. .. .	..	..	938,378	938,378
1975-76 .. .. .	..	..	50,064	50,064
Overdue .. .. .	2,250	..	2,820	5,070
Interminable .. ..	1,000	..	..	1,000
Treasurer's option ..	2,397,148	..	..	2,397,148
Half-yearly drawings ..	144,508	..	5,360,908	5,505,416
Indefinite .. .. .	..	..	10,513,342	10,513,342
Total .. .. .	380,422,219	25,816,388	504,439,305	910,677,912

6. **Sinking Funds.**—Prior to the passing of the Financial Agreement Act 1928, the practice of providing sinking funds by the States had been consistently followed in Western Australia only. This Act contains provisions for the establishment of a sinking fund on States' debts (see p. 617). Some particulars of the transactions of the National Debt Sinking Fund (States' Account) for 1941-42 are shown below, and further details are given in the *Finance Bulletin* issued by this Bureau.

## STATE PUBLIC DEBTS, 30th JUNE, 1942 : SINKING FUNDS.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£	£	£	£	£	£	£
Total Receipts, 1941-42 ..	2,955,263	1,391,541	1,014,040	835,526	767,184	217,124	7,180,678
Total Receipts, to 30th June, 1942 ..	27,614,715	14,340,806	10,469,950	8,651,982	7,744,302	2,108,815	70,930,570
Total Funds applied to Redemptions, 1941-42 ..	4,841,969	1,634,954	1,417,366	1,199,487	1,073,334	244,283	10,411,393
Total Funds applied to Redemptions, to 30th June, 1942 ..	26,979,076	13,647,350	10,227,692	8,599,302	8,431,271	2,022,740	69,907,431
Total Funds applied to investments to 30th June, 1942(a) ..	..	..	(b) 75,800	..	Cr.954,3950	..	Cr.878,5950
Total Expenditure to 30th June, 1942 ..	26,979,076	13,647,350	10,303,492	8,599,302	7,476,876	2,022,740	69,028,836
Balance at 30th June, 1942, not permanently invested ..	635,639	693,456	166,458	52,680	267,426	86,075	1,901,734
Investments at 30th June, 1942 ..	..	..	727,102	..	..	..	727,102
Total Balance at 30th June, 1942 ..	635,639	693,456	893,560	52,680	267,426	86,075	2,628,836

(a) Less amounts received on investments realized to 30th June, 1942. (b) Excess of purchases over sales of investments. (c) Excess of sales over purchases of investments.

## D.—COMMONWEALTH AND STATE FINANCE.

1. **Revenue and Expenditure.**—The following tables show the aggregate revenue and expenditure of the Commonwealth and States for each of the five years to 1941-42, allowance having been made in cases of duplication :—

## COMMONWEALTH AND STATES : REVENUE.(a)

Year ended 30th June—				Revenue collected by Commonwealth Government. (b)	Revenue collected by State Governments. (c)	Total.
				£'000.	£'000.	£'000.
1938	..	..	..	89,416	115,393	204,809
1939	..	..	..	95,002	115,193	210,195
1940	..	..	..	111,846	120,889	232,735
1941	..	..	..	150,421	128,261	278,682
1942	..	..	..	(d) 208,486	143,057	351,543

(a) Excludes Loan receipts. (b) Excludes miscellaneous receipts from States. (c) Excludes payments by Commonwealth Government to State Consolidated Revenue Funds. (d) Excludes Pay-roll tax payments by State Governments.

## COMMONWEALTH AND STATES: EXPENDITURE.

Year ended 30th June—	Expenditure from Consolidated Revenue Funds.			Expenditure from Loan Funds.(a)		
	Common- wealth Government. (b)	State Governments.	Total.	Common- wealth Government.	State Governments.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1938 ..	75,895	125,445	201,340	4,549	13,815	18,364
1939 ..	84,674	128,764	213,438	3,594	13,178	16,772
1940 ..	99,262	133,124	232,386	(c) 31,355	15,252	46,607
1941 ..	140,786	138,402	279,188	(c) 105,209	12,185	117,394
1942 ..	200,032	(d) 148,320	348,352	(c) 212,805	8,465	221,270

(a) Net loan expenditure on Works, Services, &c. Excludes expenditure on loan flotations, funding of deficits, etc. (b) Excludes payments by Commonwealth Government to State Consolidated Revenue Funds and miscellaneous receipts from States. (c) Includes expenditure on Defence and War (1939-42), Services. (d) Excludes Pay-roll tax payments by State Governments.

2. Taxation.—The following table shows the combined Commonwealth and State taxation for each of the years 1937-38 to 1941-42, as well as the amount per head of population. Taxation collections by the State Governments which are not paid into the Consolidated Revenue Funds have been included.

## TOTAL COMMONWEALTH AND STATE TAXATION.

Particulars.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Commonwealth—	£	£	£	£	£
Customs and Excise ..	48,383,005	47,632,365	53,824,906	53,779,783	56,780,808
Sales Tax ..	8,023,886	9,308,334	12,196,175	19,792,680	26,830,085
Flour Tax ..	3,025	1,808,972	2,486,070	1,498,595	1,651,717
Other ..	12,638,569	15,287,228	21,503,512	50,312,464	94,172,735
Total ..	69,048,485	74,036,899	90,010,663	125,383,522	179,435,345
State ..	49,674,765	50,506,997	54,386,815	56,304,176	57,259,478
Grand Total ..	118,723,250	124,543,896	144,397,478	181,687,698	236,694,823
Taxation per head—					
Commonwealth (a)—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Customs and Excise	7 1 0	6 17 7	7 13 11	7 12 2	7 19 1
Sales Tax ..	1 3 4	1 6 10	1 14 10	2 16 0	3 15 2
Flour Tax ..	..	0 5 3	0 7 1	0 4 3	0 4 8
Other ..	1 16 10	2 4 2	3 1 6	7 2 4	13 3 11
Total ..	10 1 2	10 13 10	12 17 4	17 14 9	25 2 10
State (b) ..	7 5 1	7 6 2	7 16 0	7 19 10	8 1 0
Grand Total ..	17 5 11	17 19 6	20 12 10	25 14 1	33 3 3

(a) Based on mean population for each financial year.  
of the six States for each financial year.

(b) Based on aggregate mean population



3. Public Debt.—(i) *Where redeemable.* The following table shows the public debt of the Commonwealth and of the States at 30th June, in each of the years 1938 to 1942. In this table all moneys borrowed by the Commonwealth on behalf of the States have been included with State debts only, and similarly, the debts taken over by the Commonwealth from South Australia on account of the Northern Territory and of the Port Augusta-Oodnadatta Railway have been included with the Commonwealth Debt.

## COMMONWEALTH AND STATE PUBLIC DEBTS, AT 30th JUNE.

Particulars.	Where Redeemable.	1938.	1939.	1940.	1941.	1942.
Commonwealth	Aust. £ A. . .	216,400,462	218,498,483	257,116,685	320,348,199	528,520,654
	London £ Stg. . .	158,363,627	162,840,947	162,333,777	174,003,477	173,753,476
	New York £ Stg. . .	16,080,972	15,913,501	15,676,718	15,876,718	15,876,718
	Total £ (a) . .	390,845,061	397,250,931	435,127,180	510,228,394	718,150,848
States	Aust. £ A. . .	469,742,248	485,179,757	493,646,681	504,494,372	501,430,305
	London £ Stg. . .	385,888,993	384,327,833	384,162,382	384,041,606	380,422,210
	New York £ Stg. . .	28,549,461	28,264,451	27,918,001	27,486,068	25,810,388
	Total £ (a) . .	884,180,702	897,772,041	905,727,064	916,022,046	910,677,912
Total, Commonwealth and States	Aust. £ A. . .	686,142,710	703,676,240	750,763,366	824,842,571	1,032,959,959
	London £ Stg. . .	544,252,620	547,168,780	546,496,159	558,045,083	554,175,695
	New York £ Stg. . .	44,630,433	44,177,952	43,794,719	43,362,786	41,693,106
	Grand Total £(a)	1,275,025,763	1,295,022,972	1,341,054,244	1,426,250,440	1,628,828,760

(a) The "face" or "book" value of the debts without adjustment on account of currency changes since the loans were floated.

(ii) *Interest Payable.* The following table shows the interest payable on the public debt of the Commonwealth and of the States at 30th June in each of the years 1938 to 1942:—

## COMMONWEALTH AND STATE PUBLIC DEBTS: INTEREST PAYABLE, AT 30th JUNE.

Particulars.	Where Payable.	1938.	1939.	1940.	1941.	1942.
Commonwealth	Australia £ A. . .	8,301,752	3,344,627	9,420,640	11,248,796	16,135,040
	London £ Stg. (a) . .	3,201,299	3,403,554	3,387,796	3,736,322	3,655,830
	New York £ Stg. . .	785,240	777,586	775,930	775,930	775,930
	Total £ (b) . .	12,288,291	12,525,767	13,584,366	15,761,048	20,566,800
States	Australia £ A. . .	16,715,028	17,240,238	17,593,171	17,866,911	17,283,764
	London £ Stg. (a) . .	15,010,049	14,962,352	14,958,802	14,954,603	14,500,345
	New York £ Stg. . .	1,456,415	1,441,476	1,420,694	1,394,925	1,282,976
	Total £ (b) . .	33,181,492	33,644,596	33,972,667	34,216,439	33,067,085
Total Commonwealth and States	Australia £ A. . .	25,016,780	25,581,865	27,013,811	29,115,707	33,418,804
	London £ Stg. (a) . .	18,211,348	18,366,136	18,346,598	18,690,925	18,156,175
	New York £ Stg. . .	2,241,655	2,219,062	2,196,624	2,170,855	2,058,906
	Total £ (b) . .	45,469,783	46,170,363	47,557,033	49,977,487	53,633,885
Average Rate per cent.	Australia £ A. . .	£ s. d. 3 12 11	£ s. d. 3 12 9	£ s. d. 3 12 4	£ s. d. 3 11 1	£ s. d. 3 5 1
	London £ Stg. . .	3 18 5	3 18 7	3 18 7	3 18 2	3 16 7
	New York £ Stg. . .	5 0 5	5 0 6	5 0 4	5 0 2	4 18 9
	Total £ (b) . .	3 16 1	3 16 0	3 15 8	3 14 6	3 10 6

(a) Excludes suspended interest on War Debt due to the British Government. (b) The nominal amount and average rate of interest payable taking no account of exchange. (c) Includes contributions payable by Commonwealth and British Governments towards interest on Migration Loans.

(iii) *Short-term Debt.* (a) *Amount.* Particulars of the short-term debt (Treasury Bills and Debentures) of the Commonwealth and States in London and in Australia at intervals from 30th June, 1935, to 30th June, 1942, are given in the following table. These particulars are included in Public Debt tables on earlier pages.

**COMMONWEALTH AND STATES : SHORT-TERM DEBT.(a)**

Date.	Maturing in London.			Maturing in Australia.		
	Common-wealth.	States.	Total.	Common-wealth.	States.	Total.
	£'000 Stg.	£'000 Stg.	£'000 Stg.	£'000 Aust.	£'000 Aust.	£'000 Aust.
30th June, 1935 ..	10,220	23,405	33,625	..	45,124	45,124
30th June, 1936 ..	10,220	23,155	33,375	..	47,013	47,013
30th June, 1937 ..	9,720	23,155	32,875	..	46,408	46,408
30th June, 1938 ..	5,495	23,155	28,650	..	46,598	46,598
30th June, 1939 ..	4,220	23,155	27,375	..	50,228	50,228
30th June, 1940 ..	3,970	23,155	27,125	..	45,463	45,463
30th June, 1941 ..	3,720	23,155	26,875	1,750	45,423	47,173
30th September, 1941	3,720	23,155	26,875	27,500	46,683	74,183
31st December, 1941 ..	3,470	25,453	28,923	55,000	51,353	106,353
31st March, 1942 ..	3,470	25,453	28,923	76,000	49,733	125,733
30th June, 1942 ..	3,470	24,879	28,349	80,481	45,083	125,564

(a) Excludes overdrafts.

(b) *Interest Rates.* (i) *London.* The rates of interest payable on Treasury Bills and Debentures in London during the period 1934-35 to 1941-42 were as follows :—

Year.						Minimum Rate.	Maximum Rate.
						%	%
1934-35 .. .. .	..	..	..	..	..	2	3
1935-36 .. .. .	..	..	..	..	..	2	2½
1936-37 .. .. .	..	..	..	..	..	2	2½
1937-38 .. .. .	..	..	..	..	..	2	2½
1938-39 .. .. .	..	..	..	..	..	2	2½
1939-40 .. .. .	..	..	..	..	..	2	2½
1940-41 .. .. .	..	..	..	..	..	2	2½
1941-42 .. .. .	..	..	..	..	..	2	3

(ii) *Australia.* The Treasury Bill rates in Australia were as follows :—

5½ per cent. from 10th October, 1929.	2½ per cent. from 1st June, 1933.
6 per cent. from 1st October, 1930.	2½ per cent. from 1st April, 1934.
4 per cent. from 31st July, 1931.	2 per cent. from 15th October, 1934.
3½ per cent. from 27th October, 1932.	1½ per cent. from 1st January, 1935.
3½ per cent. from 21st January, 1933.	1½ per cent. from 1st May, 1940.
2½ per cent. from 18th February, 1933.	1½ per cent. from 1st May, 1943.

(iv) *Debts of States and Municipal and Semi-Governmental Bodies.* For the reasons indicated on p. 607 direct comparisons of the debts of the several States should be made with caution. The table following shows for 1940-41 particulars of the debts of the States and the debts due to the Public Creditor by Municipal and Semi-Governmental bodies in each State. This affords a more reliable comparison, but as complete records are not available over a long period, particulars showing comparisons of the growth of the debt

cannot be made. For further particulars relating to the Debt of Local and Semi-Governmental Authorities see *Finance Bulletin* No. 33 and Chapter XVIII. "Local Government," § 3, p. 629 of this volume.

**PUBLIC DEBT : STATES, MUNICIPAL AND SEMI-GOVERNMENTAL BODIES,  
1939-40 and 1940-41.**

State.	Debts of the States. (a)	Due to Public Creditor.(b)		Grand Total.
		Municipal.	Semi-Governmental Bodies.	
	£'000.	£'000.	£'000.	£'000.
New South Wales .. .. .	368,975	37,728	61,202	467,905
Victoria .. .. .	181,219	12,210	63,892	257,321
Queensland .. .. .	130,094	22,464	3,761	156,319
South Australia .. .. .	109,780	760	885	111,425
Western Australia .. .. .	97,792	3,031	116	100,939
Tasmania .. .. .	28,162	3,075	497	31,734
<hr/>				
Total, All States { 1940-41 ..	916,022	79,268	130,353	1,125,643
{ 1939-40 ..	905,727	78,650	126,481	1,110,858

**DEBT PER HEAD OF POPULATION.(c)**

	£	£	£	£
New South Wales .. .. .	131.9	13.5	21.9	167.3
Victoria .. .. .	93.5	6.3	33.0	132.8
Queensland .. .. .	125.5	21.7	3.6	150.8
South Australia .. .. .	183.1	1.3	1.5	185.9
Western Australia .. .. .	208.6	6.5	0.2	215.3
Tasmania .. .. .	118.0	12.9	2.1	133.0
<hr/>				
Total, All States { 1940-41 ..	129.4	11.2	18.4	159.0
{ 1939-40 ..	129.2	11.2	18.1	158.5

(a) Includes amounts due by Municipal and Semi-Governmental bodies, and debts due to Central Government.

(c) At 30th June, 1940 and 1941.

(b) Excludes overdrafts

4. The Financial Agreement between the Commonwealth and the States.—The original Financial Agreement between the Commonwealth and the States was made on 12th December, 1927. It was later affected by the following agreements made under the powers conferred by Section 105A of the Constitution :—

Debt Conversion Agreement—Made 21st July, 1931.

Debt Conversion Agreement (No. 2)—Made 22nd October, 1931.

Agreement relating to Soldier Settlement Loans—Made 3rd July, 1934.

The Debt Conversion Agreements did not affect the wording of the main agreement, but contained provisions stating that where their provisions were not in accordance with any contained in the Financial Agreement the former should prevail. An Agreement was made between the Commonwealth and Tasmania only on 1st July, 1928. This was not an amendment, but was made under the authority of Part III., Clause 3 (l) of the original Agreement.

A summary of the original agreement as effected by the subsequent agreements is shown on pp. 872 to 875 of the Official Year Book No. 34.



## CHAPTER XVIII. LOCAL GOVERNMENT.

### § 1. Introduction.

1. **General.**—The following statistics relating to Local Government are somewhat incomplete and otherwise unsatisfactory, but efforts are being made to obtain fuller and more reliable information. Many of the defects in the statistics of Local Government Authorities have been eliminated, and the returns are now prepared on more uniform lines and in greater detail than formerly. Owing to man-power shortage some details have not been compiled, but the latest figures available have been inserted.

2. **Roads, Bridges, etc.**—The construction and maintenance of roads, bridges and ferries are generally part of the functions of local authorities, but in New South Wales and South Australia, more especially in the large unincorporated areas, these duties are undertaken directly by the Government. In some States, moreover, a certain proportion of the roads and bridges is constructed and maintained by the Government, which, in addition, advances money for main roads to be expended by municipalities under the supervision of special Boards. Although roads, bridges and ferries constructed and maintained directly by the Government do not properly come under the heading of "Local Government", they have been included in this chapter for the sake of convenience. Owing to the difficulty of obtaining complete particulars of receipts and expenditure by the various local governing bodies in regard to roads under their control, the details of receipts and expenditure given in the following section are those of the Government only, relating either to the supervisory board or commission in the State or to direct activities of a department.

3. **Local Government Authorities.**—A description of the various systems of municipal government in the different States, and their development from the earliest date, was published in 1919 by this Bureau in a separate work entitled *Local Government in Australia*.

4. **Water Supply and Sewerage.**—In the cities of Sydney and Melbourne the control of water supply and sewerage is in the hands of special Boards, while in Adelaide and Perth these services are under the direct supervision of Government departments. In most of the other cities and towns, the municipal councils, or, in some cases, water trusts, are the controlling bodies which either construct the works out of their own resources or take them over after they have been constructed by the Government.

5. **Harbours.**—The majority of the harbours in Australia are managed by Boards, the members of which are either elected by persons interested or appointed by the Government. In a few instances, however, they are directly controlled by the Government. Only those which are controlled by Boards are dealt with in the following pages.

6. **Fire Brigades.**—In all the States, the management of fire brigades is undertaken by Boards. The members of these Boards are usually elected by the councils of municipalities and insurance companies within the districts placed under their jurisdiction, together with one or more appointed by the Government, while occasionally volunteer or country fire brigades are represented.

### § 2. Roads, Bridges, Etc.

1. **New South Wales.**—(i) *General.* A central road authority was created by legislation early in 1925 for the purpose of providing improved and uniform standards of construction and maintenance of the principal roads, and to administer Governmental subsidies for work on those roads. The funds of this authority (now the Department of Main Roads) are derived principally from taxation of motor vehicles, contributions by the Commonwealth Government from the proceeds of a tax on petrol, direct contributions by Municipal and Shire Councils and special (not statutory) assistance by the State Government by way of loan moneys or special grants from revenue funds.

There are five classifications of roads which receive assistance from the central authority, and they embrace—

*State Highways.*—Roads which are principal avenues of communication between the coast and the interior or throughout the State and connecting with such avenues in other States.

*Trunk Roads.*—Roads which, being secondary avenues of road communication, form with the State Highways and other Trunk Roads, the framework of a general system of intercommunication throughout the State.

*Ordinary Main Roads.*—Roads which are used principally by through traffic as the means of intercommunication between towns or important centres of population and which with the State Highways and Trunk Roads form part of the general system of road communication throughout the State.

*Secondary Roads.*—Roads in the Metropolitan area of Sydney which carry a substantial amount of through traffic and relieve neighbouring main roads of traffic which they would otherwise have to bear.

*Developmental Roads.*—Roads which serve to develop a district or area of land by improving or providing access to a railway station or a shipping wharf or to a road leading to a railway station or a shipping wharf.

The State is divided into two divisions for local government and road administration purposes. The Eastern Division is incorporated in shires and municipalities throughout its area, while the Western Division, which covers a wide tract of sparsely populated country, is unincorporated except for six municipalities and portions of two other municipalities within the Division.

In the Eastern Division assistance, as described hereunder, is given to local councils for works on classified roads. For other roads the cost of both construction and maintenance work is generally chargeable to the revenue of local authorities although Governmental assistance is not infrequently granted for works of construction and reconstruction. This is particularly so in times of acute unemployment and during recent years substantial sums have been distributed for roads by way of grants, primarily for this purpose. There is, in addition, a regular annual endowment of at least £150,000 for shires, a large proportion of which is used for road purposes.

The degree of subsidy from the central road fund in the Eastern Division varies according to the situation of the area concerned, and the classification of the road. There are two areas in this regard (County of Cumberland and Country) and five road classifications, as already described.

The County of Cumberland embraces all municipalities and shires between the Nepean-Hawkesbury River and the Pacific Ocean as far as Bulli on the south, and includes the metropolitan area of Sydney, while the Country covers the remainder of the Eastern Division. In addition to the whole of the motor taxation collected in the Country, with the exception of a small proportion paid into the Public Vehicles Fund, half of that collected in the County of Cumberland is required to be spent in the Country. The contribution by the Commonwealth Government from petrol taxation is distributed between the County of Cumberland and the Country in the same proportion as the motor taxation. The councils in the County of Cumberland, other than the City of Sydney, are required to pay a levy, not exceeding  $\frac{1}{4}$ d. in the £1, on the unimproved capital value of lands in their areas (with a rebate of half on lands used for rural primary production) into the County of Cumberland Main Roads Fund. The full cost of work on all proclaimed main roads in that area, together with half the costs of work on proclaimed secondary roads are met from the funds of the Department of Main Roads. The rate of contribution by Country Councils to the Country Main Roads Fund, depending on the amount expended on main roads, must not exceed  $\frac{1}{4}$ d. in the £1 of unimproved capital value. The present rates of subsidy to Councils for works in the Country are as follows:—

State Highways ..	..	Full cost.
Trunk Roads ..	..	Three-quarters of cost.
Ordinary Main Roads ..	..	Two-thirds of cost.
Developmental Roads ..	..	Full cost of approved construction works only.

For construction of bridges over 20 feet span these subsidies are increased so that the central authority meets the whole cost on State Highways and Trunk Roads, and three-quarters of the cost on ordinary main roads.

The full cost of all roads and bridges in the Western Division is met by the central road authority.

All work in the Western Division is carried out directly by the central road authority (7,766 miles) while in the Eastern Division the work is carried out by the councils except for approximately 2,000 miles, mostly on State Highways.

(ii) *Length of Roads—*

*Eastern Division—*

Proclaimed Roads (30th June, 1942)—						Miles.
State Highways	..	..	..	..	..	5,163
Trunk Roads	..	..	..	..	..	2,371
Ordinary Main Roads	..	..	..	..	..	9,590
Secondary Roads	..	..	..	..	..	81
Developmental Roads	..	..	..	..	..	2,741
Minor Roads (30th June, 1939)	..	..	..	..	..	98,613
<i>Western Division</i> (30th June, 1939)	..	..	..	..	..	7,766
						<hr/> 126,325

Of these roads, as at 30th June, 1939, 32 miles were of wood block, 332 miles cement concrete, 248 miles asphaltic concrete, 3,282 miles tar or bituminous macadam (premixed or penetrated), 2,591 surfaced water-bound macadam or gravel, 3,684 water-bound macadam, 27,037 gravel or crushed rock, and 88,852 miles were formed only, cleared only, or of natural surface.

(iii) *Revenue and Expenditure.*—The revenue and expenditure of the central road authority for the year ended 30th June, 1942, were as follows :—

Revenue.			Expenditure.		
	£			£	
Motor Taxation Fees etc.	..	1,879,297	Maintenance	..	1,293,452
Petrol Taxation	..	599,294	Construction	..	2,937,471
Councils' direct contributions	..	221,085	Interest and other loan charges	..	404,087
Loans from State Government		644,504	Other	..	223,020
Contribution from Revenue, State Government	..	383,633			
Defence Works	..	1,220,708			
Other	..	99,790			
Total	..	5,048,311	Total	..	4,858,030

The total expenditure on all roads in the State by all authorities during 1939-40 was £8,596,170.

(iv) *Sydney Harbour Bridge.* The Government expenditure in connexion with the Sydney Harbour Bridge, which amounted to £9,780,302 to 30th June, 1942, is not included in the figures above. Of this amount £8,104,189 was provided by General Loan Account, £1,665,444 from proceeds of municipal and shire rates, £10,664 from the Unemployed Relief Fund and £5 from the Public Works Fund. Interest and exchange accounted for £1,494,988 and resumpptions for £1,053,593. A reduction in the total cost of the bridge will be effected by the sale of surplus resumed lands estimated at approximately £150,000.



2. *Victoria.*—(i) *General.* With the object of improving the main roads of the State the Country Roads Board was established by legislation passed in 1912. The principal duties of the board are to determine the main roads, State highways, tourists' roads, etc., to inquire into the State's resources in road materials and the most effective methods of road construction and maintenance, and to recommend deviations to existing roads or the construction of new roads in order to facilitate communication or to improve the conditions of traffic.

(ii) *Length of Roads and Streets.*—At the end of 1940 there were 105,043 miles of roads and streets in Victoria, comprising 73 miles of wood or stone, 124 portland cement concrete, 248 asphaltic concrete and sheet asphalt, 8,623 tar or bitumen surface, 25,396 water-bound macadam, gravel, sand, and hard loam pavements, 24,854 formed only, and 45,725 surveyed only but used for general traffic. Of the total length, only 2,793 miles or less than 3 per cent. were State highways.

(iii) *Receipts and Expenditure.* Funds created under the Act are the Country Roads Board Fund, the Loan Account and the Developmental Roads Loan Account. Particulars of the operations of these Funds are given hereunder.

(a) *Country Roads Board Fund.* All fees (other than fees for licences to drive motor cars) and fines under the Motor Car Act, and all registration fees and fines for traction engines, less cost of collection of such fees and fines, are credited to this fund. The total receipts for the year 1941-42 were £2,123,811 made up as follows:—Motor registration fees, £1,443,597; contributions by municipalities for permanent works (now subject to relief), £148,463, and for maintenance works, £149,415; sale of stores and material and hire of plant, £288,345; and other sources, £93,991. The expenditure for the year was £1,860,795, comprising maintenance and reconditioning of main roads and State highways, etc., £630,670; plant, stores, administration, etc., £535,711; and interest, sinking funds, etc., £694,414. The expenditure shown for interest, sinking funds, etc., comprises the following items:—Interest and sinking fund payments on account of loan moneys, £358,723; repayments by municipalities for interest and sinking fund, £111,901; and relief to municipalities from liability in respect of interest and sinking fund, £223,790.

(b) *Country Roads Board Loan Account.* Loans to the amount of £5,322,000 have been authorized from time to time for permanent works on main roads and State highways under the Country Roads Acts. During the year ended 30th June, 1942, there were no transactions, and the total expenditure to 30th June, 1942, was £5,047,126.

(c) *Developmental Roads Loan Account.* For the purpose of constructing and maintaining subsidiary or developmental roads, the Government was authorized to borrow sums aggregating £6,475,000. These loan moneys were exhausted at 30th June, 1937, the total expenditure at that date being £6,425,757. The difference between the two amounts represents discount and expenses in connexion with the loan.

(d) *Total Expenditure.* In addition to expenditure from the abovementioned funds the following amounts were expended under special appropriations on road construction and maintenance:—Unemployed relief, £1,212 and contributions by the Commonwealth Government under the provisions of the Federal Aid Roads Act, £171,735. While an amount of £142,128 was expended by the Commonwealth Government on Defence works.

The total expenditure by the Board on road construction and maintenance during the year ended 30th June, 1942, amounting to £945,745, may be summarized as follows:—State highways, £237,136; main roads, £438,260; developmental roads, £100,308; unemployment relief (on main and developmental roads, etc.), £1,212; tourist roads, £20,605; Murray River bridges and punts, £2,908; roads adjoining Commonwealth properties, £3,188; Commonwealth defence work—unemployment relief, £9,072; Northern Territory, £131,898; and Allied Works Council, £1,158.

3. *Queensland.*—(i) *General.* Under the Main Roads Act 1920 a Main Roads Board was constituted, consisting of three members appointed by the Governor in Council. In 1925 the Board was abolished and its powers conferred upon a single Commissioner.

The duties of the Commissioner are to carry out surveys and investigations necessary to determine State highways, main, developmental, secondary, mining access, tourist roads, or tourist tracks, and, under certain circumstances, to undertake their construction and maintenance.

With the exception of State highways, mining access roads or tourist tracks, no road can be proclaimed until the Commission has considered any objections thereto lodged by interested local authorities.

Local authorities are not liable for the return of any expenditure for construction on State highways, mining access roads (serving only mining interests) or tourist tracks, but are, however, responsible for up to 50 per cent. of maintenance. The liability in respect of main roads is 20 per cent. of construction costs; developmental roads 20 per cent. of interest on construction costs; secondary roads 50 per cent. of construction costs; and tourist roads as agreed prior to commencement of work. The liability in respect of maintenance of State highways, main, developmental and secondary roads is 50 per cent. In the case of mining access roads and tourist tracks no repayment is required. The Commissioner has power to reduce the amount of contribution payable by any local authority in respect of permanent works and maintenance where the rate required to produce the annual repayment exceeds 1d. in the £1 on the property valuation of the whole area. He has also power to grant relief in exceptional circumstances.

(ii) *Length of Roads.* At 30th June, 1940, there were under various local authorities 125,095 miles of roads in Queensland, of which 6,320 were natural or artificial sand-clay loam, 6,287 water-bound pavement, 1,432 water-bound pavement with bitumen surface, 946 bituminous penetration macadam, 64 concrete, 27,616 formed only and 82,430 unconstructed but used for general traffic. The roads under the control of the Main Roads Commission, at 30th June, 1942, were 16,446 miles comprising 9,201 miles of main roads, 5,880 of State highways and 1,365 of developmental, tourist, etc., roads.

(iii) *Receipts and Expenditure.* During the year ended 30th June, 1942, the receipts of the Commission amounted to £2,319,255, including £455,120 from the Treasury Loan Fund, £777,206 from motor fees, £422,889 from the Commonwealth for works under the Federal Aid Roads scheme and £367,100 from Consolidated Revenue. Disbursements amounted to £2,423,883, including £1,161,697 on permanent works, and £344,657 on maintenance.

4. *South Australia.*—(i) *General.* The Highways Act 1926-1938 created a Commissioner of Highways and provided for a Highways Fund. The Commissioner is virtually empowered to determine upon which main roads he will spend the moneys available: in doing which he has to take into account (a) the moneys voted, or likely to be voted, by Parliament for main roads; (b) whether the road is or will be the main trunk route (i) connecting any large producing area, or any area capable of becoming in the near future a large producing area, with its market or nearest port or railway station; (ii) connecting two or more large producing areas, or areas capable of becoming in the near future large producing areas, or between two or more large centres of population; (iii) between the capital and any large producing area or any large centre of population; (iv) between the capitals of this State and any other State; and (c) whether the area through which the road passes is, or in the near future will be, sufficiently served by a railway or railways.

After providing for certain fixed charges the Highways Fund is to be credited with the balance received from (a) licence-fees and registration-fees under the Road Traffic Act 1934-1942; (b) fees for hawkers' licences; and (c) all loans raised and appropriated for roads. All moneys received by the State from the Commonwealth under the Federal Aid Roads scheme are also expended by the Commissioner of Highways under the general provisions of the Highways Act.

(ii) *Length of Roads.* The total length of roads in use for general traffic within local governing areas at 30th June, 1941, was 52,118 miles, of which 22 miles were paved with wood or stone; 248 were bituminous concrete; 1,812 bitumen penetration; 14,411 bitumen surfaced, metalled or gravelled; 8,515 formed only; and 27,110 unformed. At 30th June, 1942, the Commissioner was maintaining departmentally about 2,177 miles of improved main roads.

(iii) *Receipts and Expenditure.* The expenditure from the Highways Fund for the year ended 30th June, 1942, was £401,495, including £150,871 for interest on loans. The amount received from the Commonwealth Government for expenditure on Federal Aid Roads was £244,327, the amount allocated from the Highways Fund for roads in newly-settled areas, etc., was £57,799, and grants in aid of rates collected paid to Councils amounted to £17,350. In sparsely-settled districts outside the incorporated areas, the roads and bridges are constructed and maintained chiefly by the Engineering and Water Supply Department under arrangement with the Commissioner of Highways. The amount so expended during the same period was £15,719.

5. *Western Australia.*—In Western Australia the construction, maintenance and management of roads, streets and bridges are the functions of Municipalities and Road Boards.

Certain principal highways and developmental roads are proclaimed main roads under the control of the Commissioner of Main Roads, appointed under the Main Roads Act 1930. At 30th June, 1941, the length of "Declared Main Roads" totalled 3,062 miles.

6. *Tasmania.*—(i) *Length and Description of Roads.* At 30th June, 1942, there were 9,406 miles of roads in Tasmania, comprising 618 of bitumen or oil-sprayed; 5,147 metalled and gravelled; 2,274 formed; and 1,367 grubbed and cleared. Of the total length, 1,413 miles were State highways.

(ii) *Construction.* In Tasmania the cost of construction of roads and bridges is borne almost entirely by the State Government. Half the proceeds of the sale of land has been applied to form a Crown Lands Fund for the construction of roads to new holdings. This fund has in recent years more than met the demands on it, and expenditure therefrom since 1918 has been limited to £10,000 annually, the balance being used for redemption of debt.

Loan money expended by the Public Works Department during 1941-42 on the construction of roads and bridges amounted to £41,284, and expenditure from the Crown Lands Fund to £518. In addition, the sum of £69,089 provided by the Commonwealth Government was expended on roads. New-road mileage completed during the year was 12 miles metalled and gravelled and 8 miles formed under State votes, and 24 miles of reconstruction under the Federal Aid Roads scheme. During the year the Departmental activities have been largely confined to Defence work and road work has been mostly maintenance.

(iii) *Maintenance.* The maintenance of roads, other than State highways, is undertaken by the municipalities out of their own revenues. All bridges costing over £50 are maintained by the State Government. The maintenance of State highways is provided for by the State Highways Act 1929, which created the State Highways Trust Fund to which is paid from Consolidated Revenue a sum equal to the amount of all motor taxes collected in the immediately preceding financial year and paid into the Treasury, less 2 per cent. The expenditure on State highways for 1941-42 was £130,080.

7. *Summary of Net Loan Expenditure on Roads and Bridges.*—Figures showing the total expenditure on roads and bridges in the States are not available. The following table shows the annual net loan expenditure on roads and bridges by the central Government in each State during the years 1937-38 to 1941-42, together with the aggregate amounts of expenditure up to 30th June, 1942. The net loan expenditure by the Government is not available for Tasmania and the figures given in the following table represent the actual amounts expended by the Department of Public Works, including sums for unemployment relief.



## ROADS AND BRIDGES : NET LOAN EXPENDITURE.

Year ended 30th June—	N.S.W.	Victoria.(a)	Q'land.(b)	S. Aust.(c)	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
1938 ..	716,051	Cr. 50,200	342,665	152,500	154,713	62,634	1,378,363
1939 ..	1,850,480	Cr. 22,502	357,252	199,900	144,860	140,770	2,670,760
1940 ..	450,574	Cr. 25,466	457,343	71,000	210,513	108,035	1,271,999
1941 ..	148,853	Cr. 30,360	475,421	52,000	37,932	44,856	728,696
1942 ..	606,611	Cr. 28,684	529,448	Cr.16,000	Cr. 13	41,284	1,132,646
Total to 30 6/42	20,932,552	12,645,199	6,512,854	3,875,145	13,183,327	5,773,119	52,922,196

(a) Represents expenditure from loan and on account of loan. (b) Amounts include relative expenditure by the Public Estate Improvement Branch. (c) Adjusted figures, excludes credits due to purchase of securities. (d) Gross loan expenditure.

The loan expenditure given above does not represent the total expenditure on roads and bridges. It relates for the most part to capital expenditure on new works, but it must be supplemented by similar expenditure from loan funds of local bodies, Federal grants and unemployment relief moneys, and further account must be taken of expenditure on maintenance which is mainly defrayed from the current revenues.

## § 3. Local Government Authorities.

1. Area, Population and Value of Ratable Property.—(i) *New South Wales.* Practically the whole of the State, with the exception of the greater portion of the Western Division, has been divided into municipalities and shires, the total area incorporated at the end of 1940 being 184,007 square miles. The areas incorporated comprise the whole of the Eastern and Central Divisions of the State (with the exception of Lord Howe Island, the islands in Port Jackson and the quarantine station at Port Jackson) and a small portion of the Western Division consisting of the whole of six and part of two municipalities.

The Local Government Act 1919 and subsequent amendments and ordinances constitute the basis of the operation of Local Government bodies known as municipalities, shires and county councils. The operations of the City of Sydney are governed by the Sydney Corporation Act 1932-1941.

The City of Greater Newcastle was constituted in 1938 with increased powers by special Act, by the union of the City of Newcastle with ten suburban municipalities and portions of two shires, and is subject to the general provisions of the Local Government Act.

The area, population and value of ratable property in the incorporated areas at 31st December, 1940, are given below. The valuations relate to ratable property only and exclude Government and other non-ratable property, the value of which is not inconsiderable in the aggregate.

## LOCAL GOVERNMENT AUTHORITIES, NEW SOUTH WALES : AREA, POPULATION AND VALUE OF RATABLE PROPERTY AT 31st DECEMBER, 1940.

Local Bodies.	Number.	Area.	Population.	Value of Ratable Property.		
				Unimproved Capital Value.	Improved Capital Value.	Assessed Annual Value.(a)
		Acres.		£	£	£
Metropolitan—						
Capital City ..	1	3,220	88,840	50,474,458	171,705,000	7,726,725
Other ..	48	152,088	1,212,270	102,704,967	316,067,917	25,012,302
Total ..	49	155,308	1,301,110	153,179,425	487,772,917	32,739,027
Outside Metropolitan Area ..	248	117,609,152	1,488,013	173,700,884	(b)	(b)
Grand Total ..	297	117,764,460	2,789,123	326,880,309	(b)	(b)

(a) Nine-tenths Annual Rental Value.

(b) Not available.

(ii) *Victoria*. Local Government is established throughout the State, the various divisions being termed cities, towns, boroughs, or shires. The only unincorporated areas are French Island in Western Port Bay and two other smaller islands. Melbourne and Geelong were incorporated under special statutes prior to the establishment of a general system of local government, but are now subject to several provisions of the Local Government Act.

The financial years of the cities of Melbourne and Geelong, which, prior to 1938, ended on 31st December and 31st August respectively, now end, with those of all other municipalities, on 30th September. The area, population and value of ratable property in the incorporated areas are given below :—

**LOCAL GOVERNMENT AUTHORITIES, VICTORIA : AREA, POPULATION AND ESTIMATED VALUE OF RATABLE PROPERTY.**

Local Bodies.	Number.	Area.	Population 1942.	Estimated Value of Ratable Property 1940-41.	
				Improved Capital Value.	Annual Value.
Metropolitan— Capital City .. ..	1	Acres. 7,740	96,000	£ 100,001,900	£ 5,000,095
Other(a) .. ..	28	160,906	1,019,200	295,516,897	16,324,934
<b>Total</b> .. ..	<b>29</b>	<b>168,646</b>	<b>1,115,200</b>	<b>395,518,797</b>	<b>21,325,029</b>
<b>Outside Metropolitan Area</b> ..	<b>168</b>	<b>56,074,895</b>	<b>854,780</b>	<b>306,907,230</b>	<b>15,383,351</b>
<b>Grand Total</b> .. ..	<b>197</b>	<b>56,243,541</b>	<b>1,969,980</b>	<b>702,426,027</b>	<b>36,708,380</b>

(a) Includes the whole of the Shire of Braybrook and the whole of the City of Heidelberg.

(iii) *Queensland*.—The whole of the State (except certain islands along the coast, the Dawson Valley Irrigation area and the Somerset Dam area) is incorporated into cities, towns and shires under the Local Authorities Act 1902 and its amendments. The following table gives particulars of the area, population, and value of ratable property in the incorporated areas for the year 1939-40 :—

**LOCAL GOVERNMENT AUTHORITIES, QUEENSLAND : AREA, POPULATION AND VALUE OF RATABLE PROPERTY, 1939-40.**

Local Bodies.		Number.	Area.	Population. (a)	Unimproved Capital Value.
			Acres.		£
Capital City .. ..	1	246,400	335,520	21,134,172	
Outside Metropolitan Area ..	143	428,446,720	682,957	51,708,046	
<b>Total</b> .. ..	<b>144</b>	<b>428,693,120</b>	<b>1,018,477</b>	<b>72,842,218</b>	

(a) At 31st December, 1939.

(iv) *South Australia*. The settled portion of South Australia is incorporated, being mostly under municipal corporations in the larger cities and towns, and district councils in the agricultural areas.

The following table gives the area, population and value of ratable property in incorporated areas for the year ended 30th June, 1941.

**LOCAL GOVERNMENT AUTHORITIES, SOUTH AUSTRALIA : AREA, POPULATION AND VALUE OF RATABLE PROPERTY, 1941.**

Local Bodies.	Number.	Area.	Population.	Value of Ratable Property.		
				Unimproved Capital Value.	Improved Capital Value.	Annual Value.
Metropolitan—		Acres.		£	£	£
Capital City ..	1	3,772	31,390	11,800,000	29,000,000	1,410,000
Other ..	20	99,215	313,610	(a)	77,000,000	3,775,000
Total ..	21	102,987	345,000	(a)	106,000,000	5,185,000
Outside Metropolitan Area ..	121	34,400,079	236,521	(a)	82,000,000	4,130,000
Grand Total ..	142	34,503,066	581,521	(a)	188,000,000	9,315,000

(a) Not available.

(v) *Western Australia.* In this State, Local Government is carried on by means of (a) Municipalities, and (b) District Road Boards. Certain functions are delegated to health boards, the personnel of which, in most cases, coincides with those of the municipalities and district road boards. The following table gives particulars of the area, population and value of ratable property in incorporated areas for the year ended October, 1941, for Municipalities, and the year ended June, 1941, for District Road Boards.

**LOCAL GOVERNMENT AUTHORITIES, WESTERN AUSTRALIA : AREA, POPULATION AND VALUE OF RATABLE PROPERTY, 1941.**

Local Bodies.	Number.	Area.	Population.	Value of Ratable Property.		
			(a)	Unimproved Capital Value.	Improved Capital Value.	Annual Value.
Municipalities—		Acres.		£	£	£
Metropolitan—						
Capital City ..	1	15,475	85,020	(b)	31,000,000	1,620,140
Other ..	8	11,374	64,633	(b)	14,054,503	676,330
Outside Metropolitan Area ..	12	32,768	48,346	(b)	6,768,928	526,884
Total ..	21	59,617	197,999	(b)	51,823,431	2,832,363
District Road Boards—						
Metropolitan ..	11	(c) 322,560	85,403	3,854,149	(b)	1,247
Outside Metropolitan Area ..	116	624,206,623	183,680	17,875,807	(b)	539,164
Total ..	127	624,529,183	269,083	21,729,956	(b)	540,411
Grand Totals ..	148	624,588,800	467,082	(b)	(b)	3,372,774

(a) Estimated population on 31st December, 1941. (b) Not available. (c) Includes Swan District (235,264 acres), of which 8,064 acres only are in the Metropolitan Area.

The method of valuation is not identical in the case of all District Road Boards, as in some the assessment is based on the unimproved capital value and in others partly on the unimproved capital value and partly on the annual value. The amounts given are the totals for the areas rated on each valuation, and are not a function of each other.

(vi) *Tasmania.* The whole State is divided into municipal districts, Hobart and Launceston being incorporated under separate Acts. The following table gives particulars of the area, population and value of ratable property in incorporated areas for the year ended June, 1942.



## LOCAL GOVERNMENT AUTHORITIES, TASMANIA : AREA, POPULATION AND VALUE OF RATABLE PROPERTY, 1942.

Local Bodies.	Number.	Area.	Population.	Value of Ratable Property.		
				Unimproved Capital Value.	Improved Capital Value.	Annual Value.
Metropolitan—		Acres.		£	£	£
Capital City ..	1	17,760	52,500	5,143,578	14,738,006	924,310
Other(a) ..	2	99,000	15,945	1,113,372	3,294,794	191,278
Total ..	3	116,760	68,445	6,257,450	18,032,800	1,115,588
Outside Metropolitan Area ..	46	16,661,240	172,725	17,202,195	39,891,955	2,160,878
Grand Total ..	49	16,778,000	241,170	23,459,645	57,923,855	3,276,466

(a) Includes the whole of the Municipalities of Clarence and Glenorchy.

2. Revenue and Expenditure.—As the result of resolutions adopted at a conference of Statisticians in 1936 the financial statistics of Local Government Authorities are now compiled in the various States on a more comparable basis than formerly.

In the returns of revenue and expenditure in the following tables for the year 1939-40 the proceeds from loans and expenditure thereof have been excluded, as have the operations of business undertakings controlled by the various Local Government Authorities. The profits resulting from the working of these undertakings have been taken into receipts and shown separately.

## LOCAL GOVERNMENT AUTHORITIES : REVENUE, 1939-40.

Particulars.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<b>Taxation—</b>	£	£	£	£	£	£	£
Rates (net) ..	5,588,500	3,886,772	2,793,272	917,693	664,955	386,976	14,335,254
Penalties ..	102,600	31,093			242	1,143	
Licences ..	113,162	87,025	33,191	29,584	19,800	9,783	
Total ..	5,774,290	4,004,890	2,826,463	947,277	706,977	397,902	14,627,799
<b>Public Works and Services—</b>							
Sanitary and garbage services ..	462,270	162,816	404,459	20,807	68,237	11,169	1,129,758
Council properties ..	571,063	554,933	341,619	99,757	82,730	58,120	1,699,155
Street construction ..	304,584	175,551	26,002	40,993	15,796	912	563,838
Other ..	205,302	48,876	25,879	25,783	4,918	9,696	320,454
Total ..	1,543,219	942,176	797,989	178,334	171,590	79,897	3,713,205
<b>Government Grants—</b>							
Unemployment relief ..	646,715	710,009	29,501	18,247			1,404,472
Roads ..	1,371,500	64,712	307,031	361,980	166,448	18,817	
Other ..	316,898	149,665	396,678	4,792	2,243	8,897	
Total ..	3,360,182	926,788	733,213	385,025	171,691	32,270	5,609,169
<b>Profits from Business Undertakings—</b>							
..	..	226,991	15,633	..	75,808	19,162	337,594
<b>Fees and fines</b> ..	..	11,583	172,793	17,730	2,124	12,586	723,129
<b>All other</b> ..	..	42,676					
Total ..	10,077,691	6,155,104	4,546,091	1,554,911	1,516,750	530,270	25,010,896

(a) Figures for New South Wales relate to the year ended 31st December, 1939, later figures not being available. Furthermore they are on an income and expenditure basis as distinct from those of other States which are on a cash basis.

(b) Includes grants for special work tending to relieve unemployment. (c) Includes £41,926 reimbursements from Highways Department. (d) Includes Special Grants for Sewerage and Drainage. (e) Includes £344,818 collections in connexion with vehicle registrations.

In the next table the expenditure for the year 1939-40 is shown. The figures exclude expenditure connected with the debt services of business undertakings.

### LOCAL GOVERNMENT AUTHORITIES : EXPENDITURE, 1939-40.

Particulars.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£	£	£	£	£	£	£
General Administration	681,586	669,657	314,570	135,493	134,968	62,170	1,998,444
Debt Services (excluding business undertakings)—							
Interest ..	891,339	511,170	610,716	42,054	95,221	31,725	2,182,225
Redemption ..	1,135,400	422,883	429,794	72,660	144,948	32,946	2,238,631
Exchange ..	(b)	..	77,289	..	3,360	3,492	84,141
Other ..	4,945	6,516	930	..	526	..	12,917
Total ..	2,031,684	940,569	1,118,729	114,714	244,055	68,163	4,517,914
Public Works and Services—							
Roads, streets and bridges ..	5,266,369	1,935,218	1,273,338	915,078	664,329	217,248	10,271,580
Health administration ..	145,374	190,339	102,211	94,989	38,313	17,056	588,282
Sanitary and garbage services ..	641,924	292,540	360,901	59,076	96,061	27,731	1,478,233
Street lighting ..	352,114	161,768	72,824	59,806	48,414	22,833	717,759
Council properties ..	1,123,258	781,505	325,466	160,946	226,292	73,417	2,690,884
Other ..	304,925	109,119	(c)514,524	32,105	15,076	15,353	991,102
Total ..	7,833,964	3,470,489	2,649,264	1,322,000	1,088,485	373,638	16,737,840
Grants—							
Fire brigades ..	118,611	74,551	26,164	(d)	25,393	4,849	249,568
Hospitals and ambulances ..	22,556	51,107	303,775	(d)	3,982	2,782	878,296
Other charities ..			500	3,135		1,230	
Other ..	(e)205,780	(f)264,762	11,638	2,058	3,271	1,720	
Total ..	346,947	390,420	342,077	5,193	32,646	10,581	1,127,864
All other ..	(g) 238,466	(h)730,193	114,732	1,484	36,503	24,909	669,355
Total ..	10,655,715	6,201,328	4,539,372	1,578,884	1,536,657	539,461	25,051,117

(a) Figures for New South Wales relate to the year ended 31st December, 1939, later figures not being available. Furthermore they are on an income and expenditure basis as distinct from those of other States, which are on a cash basis. (b) Included with interest. (c) Includes £360,483 for Sewerage and Drainage. (d) Compulsory contributions, included under Public Works and Services. (e) To Main Roads Department. (f) Includes £191,230 to Country Roads Board. (g) Includes deductions to offset duplication in the figures above caused by expenditure on the purchase of assets and depreciation of same, etc. (h) Includes £707,400, mainly for sustenance work.

3. New Money Loan Raisings, Debt and Interest Payable.—Particulars are given in the following table of new money loan raisings during the year 1940-41 and the amount of debt at 30th June, 1941, together with the interest payable annually thereon. In addition to those Local Government Authorities referred to above, the table includes details for those boards or statutory authorities administering works or services such as water supply, sewerage, electricity, roads, tramways, harbours, fire brigades, trading activities, marketing agencies, etc.

# LOCAL AND SEMI-GOVERNMENTAL AUTHORITIES: NEW MONEY LOAN RAISINGS, DEBT, AND INTEREST PAYABLE, 1940-41.

Particulars.	N.S.W. £'000.	Victoria. £'000.	Q'land. £'000.	S. Aust. £'000.	W. Aust. £'000.	Tasmania. £'000.	Total. £'000.
<b>LOCAL GOVERNMENT AUTHORITIES.</b>							
New Money Loan Raisings(a)—							
From Government ..	11	4	289	11	..	..	315
From Public ..	1,342	347	1,560	10	89	146	3,494
Total ..	1,353	351	1,849	21	89	146	3,809
Funds Provided for Redemption(a)—							
Government Loans ..	295	40	361	30	..	11	737
Loans due to Public ..	1,685	600	643	52	231	137	3,348
Total ..	1,980	640	1,004	82	231	148	4,085
Debt—							
Due to Government ..	1,236	548	10,073	80	6	315	12,258
Due to Banks (Net Overdraft) ..	156	422	349	36	22	2	987
Due to Public Creditor (b) ..	37,727	12,211	22,464	760	3,031	3,075	79,268
Total (b) ..	39,119	13,181	32,886	876	3,059	3,392	92,513
Maturing Overseas (b) ..	7,320	..	8,869	..	552	800	17,541
Interest Payable (b) ..	1,738	577	1,517	39	134	148	4,153

## SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES.

New Money Loan Raisings(a)—							
From Government ..	..	474	735	568	..	..	1,777
From Public ..	4,129	1,196	232	1	13	..	5,571
Total ..	4,129	1,670	967	569	13	..	7,348
Funds Provided for Redemption(a)—							
Government Loans ..	214	451	199	149	2	21	1,036
Loans due to Public ..	638	1,623	85	6	12	12	2,376
Total ..	852	2,074	284	155	14	33	3,412
Debt—							
Due to Government ..	22,850	4,578	9,798	7,934	218	295	45,673
Due to Banks (Net Overdraft) ..	296	51	1,312	33	1	..	1,693
Due to Public Creditor (b) ..	61,202	63,892	3,761	885	117	497	130,354
Total (b) ..	84,348	68,521	14,871	8,852	336	792	177,720
Maturing Overseas (b) ..	5,389	6,639	..	..	..	..	12,028
Interest Payable (b) ..	3,116	2,730	579	349	16	33	6,823

(a) Excludes Loans raised and entirely redeemed within the year. (b) Includes Debt or Interest payable in London and New York, which are in £ stg. Dollars have been converted to £ stg. at the rate of 4.8665 dollars to £1 stg.

## § 4. Water Supply, Sewerage and Drainage.

1. New South Wales.—(i) *General.* In Sydney and its suburbs the water supply and sewerage systems are controlled by the Metropolitan Water, Sewerage and Drainage Board, and in Newcastle and its suburbs and in the Maitland and Cessnock areas by the Hunter District Water Board. The Metropolitan Board's services extend to the South Coast and embrace Wollongong and Port Kembla. In country districts, both waterworks and sewerage works were formerly constructed by the Public Works Department, and, when completed, handed over to the local government authority affected, by which the cost was to be repaid. Under more recent arrangements councils are now usually required to raise loans to meet the capital cost and to undertake the work of construction. In certain cases the Government contributes towards the cost and assists councils in the payment of interest on loan debt.

(ii) *Waterworks.* (a) *Metropolitan.* The main catchment of the metropolitan water system is drained by the Nepean, Cataract and Cordeaux Rivers. It is 347 square



miles in extent and the combined capacities of the storage reservoirs is 125,591 million gallons. Water is drawn also from the Woronora and Warragamba Rivers, with catchments of 29 square miles and 3,383 square miles respectively. A reservoir on the Woronora River was completed on 22nd October, 1941, and has a capacity of 15,791 million gallons. Water from the Warragamba River is drawn by pumps from the normal river flow which is impounded by a low weir. The off-take varies according to the river flow, the maximum being 40 million gallons per day. This scheme is in the first stage of development. Service reservoirs throughout the metropolitan system number 91, with a total capacity of 535,388,000 gallons. At 30th June, 1942, the length of mains was 4,573.8 miles, and the average daily supply in 1941-42 was 64,400,000 gallons.

(b) *Newcastle*. The water supply is drawn from two sources (1) The Chichester Reservoir, with a storage capacity of about 5,000 million gallons, from which water is piped 53 miles to Newcastle, and (2) The Tomago Sandbeds, tapping ground water stored in an area extending northerly along the coast from the Hunter River Estuary towards Port Stephens. In addition to supplying Newcastle, water is reticulated in Maitland, 20 miles distant from Newcastle, in the Cessnock coal-mining field, and in areas adjoining these centres. The supply also extends to the farming areas of Miller's Forest and the lakeside resorts of Belmont, Swansea, Toronto, Wangi, Dora Creek and Morisset and Cooranbong. Service reservoirs distributed throughout the Water Supply District number 41, with a total storage capacity of 103,953,510 gallons. The total length of mains at 30th June, 1942, was 1,033 miles.

(c) *Water Supplied, etc.* The following table gives the number of houses, the estimated population supplied, and other details for the year 1941-42 :—

**WATERWORKS, SYDNEY(a) AND NEWCASTLE : WATER SUPPLIED, 1941-42.**

System.	Number of Premises Supplied.	Estimated Population Supplied.	Average Daily Supply.	Total Supply for the Year.	Average Daily Supply.	
					Per Property.	Per Head of Estimated Population.
	No.	No.	'000 Gallons.	'000 Gallons.	Gallons.	Gallons.
Sydney (a) ..	374,710	1,546,000	64,400	23,521,000	173	41.80
Newcastle ..	51,708	206,800	15,173	5,538,126	293	73.36

(a) Includes part of South Coast.

(iii) *Sewerage and Drainage*. (a) *Metropolitan*. The Sydney sewerage system consists of three main outfalls, discharging into the Pacific Ocean. During 1941-42, new sewers laid measured 47.2 miles and 0.01 miles of stormwater drains were constructed.

(b) *Newcastle Sewerage Works*. The sewerage works for Newcastle and its inner suburbs, as originally designed, were completed by the Department of Public Works and vested in the Board. Wallsend has been provided with sewers by the Board. The system has its outfall at Merewether Gulf, south from Newcastle. Cessnock, and the towns of West Maitland, East Maitland and Morpeth are sewered, the original designs being completed by the Department of Public Works and vested in the Board. Each area has its own treatment works. The townships of Belmont, and Marks Point, Toronto Boolaroo and Speers Point, Cardiff, Kurri Kurri, Weston, Pelaw Main and vicinity and Bellbird are also provided with sewers constructed by the Board. Belmont and Marks Point have an ocean outfall : Boolaroo, Speers Point, Cardiff, a common treatment works ; Toronto and the Kurri Kurri areas have their own works, whilst Bellbird discharges into the Cessnock system. The length of new sewers laid was 15 miles in 1941-42 and properties connected increased by 2,267.

The stormwater drainage of Newcastle and adjoining areas is divided into two catchment areas, namely, the works in the Cottage Creek Stormwater Area and the works in the Throsby Creek Stormwater Area. A drainage rate of 3d. in the £1 on assessed annual value of ratable property was levied in 1941-42.

(c) *Particulars of Services.* The following table supplies details of sewerage services and stormwater drains as at 30th June, 1942.

## SEWERAGE AND DRAINAGE : SYDNEY(a) AND NEWCASTLE, 1941-42.

System.	Premises Drained.	Population Served.	Length of Sewers.	Length of Stormwater Drains.
	No.	No.	Miles.	Miles.
Sydney (a) .. ..	276,900	1,142,500 <sup>c</sup>	2,751.9	87.7
Newcastle .. ..	33,336	133,000	568.9	37.1

(a) Includes part of South Coast.

(d) *Finances.* The following statement shows the revenue and expenditure on account of the services of waterworks, sewerage and drainage during 1941-42 :—

## WATERWORKS, SEWERAGE AND DRAINAGE : SYDNEY(a) AND NEWCASTLE.

		Expenditure.						
Item.	Capital Debt.	Revenue.	Working Expenses, including Renewals Reserve.	Interest.	Exchange on Interest.	Sinking Fund.	Surplus or Deficit	
Sydney (a)—	£	£	£	£	£	£	£	
Water ..	28,057,970	2,034,397	719,193	1,041,760	67,867	174,587	+ 30,990	
Sewerage ..	17,366,901	1,244,386	430,779	689,999	39,383	104,422	— 20,197	
Drainage ..	864,409	63,411	14,402	36,830	2,279	4,332	+ 5,568	
Total ..	46,289,280	3,342,194	1,164,374	1,768,589	109,529	283,341	+ 16,361	
Newcastle—								
Water ..	3,842,583	282,710	151,634	122,997	11,148	19,035	— 22,104	
Sewerage ..	2,180,912	167,215	85,017	80,168	4,004	10,672	— 13,546	
Drainage ..	115,223	17,858	11,463	5,276	518	617	— 16	
General ..	18,535	..	..	..	..	..	..	
Total ..	6,157,253	467,783	249,014	208,441	15,670	30,324	— 35,666	

(a) Includes part of South Coast.

(iv) *Waterworks, Sewerage and Stormwater Drainage Works in Country Towns.\** The capital indebtedness of the water and sewerage schemes in country towns controlled by local councils was £6,422,361 at 31st December, 1939, namely, £3,793,567 for water and £2,628,794 for sewerage. Of the foregoing amounts, £877,988 for water and £226,674 for sewerage are owing to the State Government. At 31st December, 1939, country waterworks were in operation or under construction in 82 municipalities and 37 shires, and country sewerage services in 50 municipalities and 10 shires. In addition two county councils, each comprising four shires, had been formed to supply water to towns within the areas of constituent councils, but the work of construction was only in the initial stages at the end of 1939.

Two country water storage systems—South-west Tablelands and Junee—are administered by the Department of Works and Local Government. These deliver water into service reservoirs for reticulation by Councils; only a small quantity is sold directly to private consumers. The capital indebtedness of these systems was £1,058,044 at 31st December, 1942.

\* Excludes the area of operation of the Hunter District Water Board (Newcastle).

A water supply system at Broken Hill was transferred from the control of the Department of Works and Local Government to a special Board on 1st January, 1939. Capital debt owing to the State was written off and the Board commenced to raise loans on its own behalf to finance the construction of water amplification works and sewerage services. In 1942 income amounted to £66,164 and expenditure to £56,046; the debenture debt was £248,930 at 31st December, 1942.

2. *Victoria.*—(i) *A. Melbourne and Metropolitan Board of Works.* (a) *General.* All land within a radius of 13 miles of the Post Office at the corner of Bourke and Elizabeth streets, Melbourne, and the remaining areas of the Cities of Mordialloc and Moorabbin and certain portions of Shires of Dandenong and Blackburn and Mitcham (all of which portions are outside such radius), are included in the metropolis for water supply, sewerage, main drainage and river improvement purposes. This territory covers 447 square miles of land area, and in 1942 embraced 26 cities, and parts of one other city and of 11 shires, or a total of 38 municipalities or portions thereof. In addition, the Board supplies water to certain municipalities outside the metropolis.

The Board's liability at 30th June, 1942, for loans raised was £26,240,450. The Board was then still empowered to borrow £899,484 before reaching the limit of its borrowing powers.

(b) *Receipts and Expenditure.* The ordinary receipts and expenditure for the year 1941-42 were £2,651,511 and £2,035,645 respectively, and the loan receipts and expenditure, £506,682 and £1,222,077 (including loan redemption £610,279) respectively.

In the following tables showing the finances of the various services, charges against General Revenue Account amounting to £610,279 have not been included.

*B. Melbourne Water Supply.* (a) *Number of Houses, Population, and Quantity of Water Supplied.* The following table gives particulars of services for 1941-42. The rate levied was 7d. in the £1 on the net annual value of the property served.

#### WATER SUPPLY, MELBOURNE : PARTICULARS OF SERVICES.

Year.	Number of Houses Supplied.	Estimated Population Supplied.	Average Daily Consumption.	Total Water Consumption for the Year.	Average Daily Consumption.		Length of Mains, Reticulation, etc.
					Per House.	Per Head of Estimated Population.	
	No.	No.	'000 Gallons.	'000 Gallons.	Gallons.	Gallons.	Miles.
1941-42 ..	302,361	1,200,373	87,565	31,961,182	289.60	72.95	3.455

(b) *Capital Cost, Revenue, Working Expenses, Interest and Surplus.* The cost of construction and the financial operations for the year 1941-42 are given below. The total capital cost to that date was £12,974,343.

#### WATER SUPPLY, MELBOURNE : FINANCES.

Year.	Capital Cost for Year.	Revenue.	Working Expenses.	Percentage of Working Expenses on Revenue.	Interest. (a)	Surplus.
	£	£	£	%	£	£
1941-42 ..	148,710	1,078,752	180,039	16.68	563,522	335,191

(a) Includes interest on renewals and payments to sinking funds.



*C. Melbourne Sewerage.* (a) *Number of Houses Connected, etc.* Particulars of services for 1941-42 are given below. The rate levied was 1s. 1d. in the £1 on the net annual value of the property served.

## SEWERAGE, MELBOURNE : PARTICULARS OF SERVICES.

Year.	Number of Houses for which Sewers are Provided.	Estimated Population for which Sewers are Provided.	Average Daily Pumping.	Total Sewage Pumped for the Year.	Average Daily Pumping.		Length of Sewers, etc.
					Per House.	Per Head of Estimated Population.	
	No.	No.	'000 Gallons.	'000 Gallons.	Gallons.	Gallons.	Miles.
1941-42 ..	286,473	1,137,297	56,885	20,763,000	198.6	50.0	2,693

(b) *Capital Cost, Revenue, Working Expenses, Interest and Surplus.* The cost of construction and the financial operations for the year 1941-42 are given below. The total capital cost to that date was £14,796,392.

## SEWERAGE, MELBOURNE : FINANCES.

Year.	Capital Cost for Year.	Revenue.	Working Expenses.	Percentage of Working Expenses on Revenue.	Interest. (a)	Surplus.
	£	£	£	%	£	£
1941-42 ..	181,289	1,197,407	232,157	19.38	685,819	279,431

(a) Includes interest on renewals and payments to sinking funds.

(c) *Metropolitan Sewage Farm.* The total area of the farm at 30th June, 1942, was 22,634 acres. The following table gives details in connexion therewith for the year 1941-42. The total capital cost to that date was £1,354,718.

## METROPOLITAN SEWAGE FARM : FINANCES.

(Included in Sewerage Finances.)

Year.	Capital Cost for Year.	Cost of Sewage Disposal.	Interest.	Trading Profit.	Net Cost of Sewage Purification.
	£	£	£	£	£
1941-42 ..	26,172	36,398	58,087	23,812	70,673

(d) *Disposal of Night-soil from Unsewered Premises.* The total number of pans cleaned by the Board at its depots at Brooklyn, Campbellfield and Moorabbin, where the night-soil was disposed of by burial, was 680,989 for the year 1941-42.

D. Melbourne Drainage and Rivers—Capital Cost, Revenue, Working Expenses, Interest and Surplus. The following table gives details in connexion therewith for the year 1941-42. The total capital cost to that date was £1,710,690.

### DRAINAGE AND RIVERS, MELBOURNE : FINANCES.

Year.	Capital Cost for Year.	Revenue.	Working Expenses.	Percentage of Working Expenses on Revenue.	Interest. (a)	Surplus.
	£	£	£	%	£	£
1941-42 .. ..	63,781	98,879	23,145	23.40'	62,034	13,700

(a) Includes interest on renewals and payments to sinking funds.

(ii) *Geelong Waterworks and Sewerage Trust.* (a) *General.* The Geelong Waterworks and Sewerage Trust, constituted in 1908, consists of five commissioners. The amount of loan money which may be raised is limited to £900,000 for water supply undertaking, £760,000 for sewerage undertaking, and £270,000 for sewerage installation to properties under the deferred payment system. The population supplied is 51,160.

(b) *Water Supply.* The catchment area is about 16,000 acres. The storage capacity of all the reservoirs is 2,738,119,800 gallons. In addition, the State Rivers and Water Supply Commission has made available a supplementary supply of a minimum quantity of 545 million gallons of water per annum from the upper reaches of the river Barwon. There are 325 miles of mains within the water supply area. The total expenditure on waterworks to 30th June, 1942, was £755,342, and the revenue for the year 1941-42 was £65,985; the sinking fund appropriations at June, 1942, amounted to £85,185, of which £74,150 has been expended in the redemption of loans. There is a water rate of 1s. in the £1 (with minima of five shillings for unbuilt-on land and one pound for tenements) on the net annual value of ratable properties. The Replacement and Contingencies Reserve (Water) amounted to £54,390.

(c) *Sewerage Works.* The sewerage scheme consists of a main outfall sewer to the ocean at Black Rock, about 9 miles from Geelong, and 13½ miles of main sewers and 146 miles of reticulation mains have been constructed. The drainage area is 9,571 acres, and the number of buildings within the drainage area is 12,688 and within the sewered areas 12,438, while 12,430 buildings have been connected with the sewers. The total expenditure to 30th June, 1942, on sewerage works was £650,184, and on the cost of sewerage installation under deferred payment conditions £257,896, of which £701 is outstanding. The revenue in 1941-42 amounted to £43,297 and the sinking fund appropriations at June, 1942, were £79,558, of which £75,702 has been expended in the redemption of loans. A general rate of 1s. 2d. in the £1 is levied on the net annual value of ratable properties. Replacement and Contingencies Reserves (Sewerage) amounted to £45,132.

(iii) *The Ballarat Water Commission and the Ballarat Sewerage Authority.* (a) *General.* The Ballarat Water Commission was constituted on 1st July, 1880, and the Ballarat Sewerage Authority on 30th November, 1920. The members of the Water Commission are the Sewerage Authority. The Commissioners number seven, three (one of whom is chairman) being appointed by the Government, and four being elected by the Council of the City of Ballarat.

(b) *Water Supply.* The Water Supply District embraces an area of about 27 square miles, containing a population of about 43,000. The total storage capacity of the six reservoirs is 2,365,558,000 gallons.

The capital cost of construction of the waterworks was £702,176. The liabilities are loans due to the Government amounting to £283,797 at 31st December, 1942. The revenue for the year 1942 was £51,054.

(c) *Sewerage.* The scheme as designed provides for a population of 90,000 persons. The capital cost of construction to 31st December, 1942, was £457,061. The method of sewage disposal is by sedimentation, oxidation and sludge digestion. One hundred and one sewerage areas have been declared as at 1st January, 1943, comprising 9,805 tenements.

The scheme is financed by debenture-issue loans from various financial institutions, £500,020 having been provided up to 31st December, 1942, of which £74,190 has been redeemed, leaving a loan liability of £423,830 for constructional works. An expenditure of £187,110 was incurred for house connexions, of which £181,518 has been redeemed, the balance outstanding being £5,592.

(iv) *Bendigo Sewerage Authority.* The members of the Bendigo City Council constitute this Authority. The sewerage district comprises the populated area of the city of Bendigo. The works are completed and the expenditure to 30th September, 1942, was £341,933 for sewerage scheme and £188,218 for house connexions, excluding those tenements connected privately. The number of tenements connected to sewers was 6,552.

(v) *Sewerage in other Country Districts.* At the end of 1940 sewerage authorities had been constituted also in the following districts :—Ararat, Bairnsdale, Beechworth, Benalla, Castlemaine, Colac, Dandenong, Dimboola, Echuca, Euroa, Hamilton, Horsham, Kerang, Kyabram, Kyneton, Leongatha, Lorne, Maffra, Mildura, Mornington, Morwell, Murtoa, Nhill, Portland, Sale, Shepparton, Swan Hill, Traralgon, Wangaratta, Warracknabeal, Warragul, Warrnambool, Werribee, Wodonga, Yarram and Yarrawonga.

(vi) *Water Supply in Country Towns and Districts.* Most of the country waterworks are controlled by the State Rivers and Water Supply Commission, but in some instances the control is by waterworks trusts or by municipal corporations.

The following table gives particulars regarding waterworks under the control of trusts and municipal corporations for the year 1942 :—

#### COUNTRY WATERWORKS, VICTORIA : FINANCES.

Year.	Under Waterworks Trusts.				Under Municipal Corporations.			
	Number of Trusts.	Capital Cost.	Capital Indebtedness.	Current Interest Outstanding.	Number of Corporations.	Capital Cost.	Capital Indebtedness.	Current Interest Outstanding.
	No.	£	£	£	No.	£	£	£
1942 ..	116	3,067,933	2,162,783	178	17	933,977	569,572	2,151

3. *Queensland.*—(i) *The Metropolitan Works Board, Department of Works, Brisbane City Council.* (a) *General.* The whole of the water supply in the metropolitan area and the bulk supply to the City of Ipswich is filtered.

The available storage in the Brisbane River is 543 million gallons, the catchment area being approximately 4,000 square miles. In Lake Manchester the storage capacity is 5,700 million gallons, and the catchment area 28.5 square miles. The capacity of Enoggera and Gold Creek reservoirs are 1,000 million gallons and 407 million gallons respectively, and the catchment areas 12.8 and 3.8 square miles respectively.

The total capacity of the service reservoirs on Tarragindi Hill, Eildon Hill, Bartley's Hill, Highgate Hill, Roles Hill, Sparkes Hill, Wickham Terrace, Bulimba and Paddington (elevated tank) is approximately 33,106,000 gallons.



(b) *Waterworks. Summary.* The following table gives a summary of operations for the year 1941-42 :—

### WATERWORKS, BRISBANE : SUMMARY.

Year.	Length of Reticulation Mains.	Number of Tenements Connected. (a)	Estimated Population Supplied.	Quantity Supplied.	Average Daily Supply.	Average Daily Supply per Head of Estimated Population.
	Miles.	No.	No.	'000 Gallons.	Gallons.	Gallons.
1941-42 ..	1,061	81,071	345,057	5,999,000	16,435,068	48.12

(a) Excludes Ipswich, which is a bulk supply.

The total length of the trunk mains is 174 miles.

(c) *Sewerage.* At 30th June, 1942, 39,505 premises were connected to the Council's sewerage system, the estimated population served being 158,020 persons. The total length of sewers in operation is 1,182 miles, consisting of 654 miles of sewers within premises, and 528 miles of main and reticulation sewers.

(d) *Waterworks and Sewerage Works Finances.* The following table gives particulars regarding finance for the year 1941-42 :—

### WATER AND SEWERAGE WORKS, BRISBANE : FINANCES.

Year.	Capital Cost.	Net Revenue from Rates.	Management and Working Expenses.	New Works Construction.	Interest and Redemption of Loans, including Sinking Fund and Overdraft.
	£	£	£	£	£
1941-42 ..	11,587,888	825,990	210,667	242,203	(a) 626,601

(a) Excludes £52,983 paid as exchange, registry fees, etc.

(ii) *Country Towns.*—(a) *Water Supply.* In addition to the city of Brisbane, there were at 30th June, 1940, seventy-nine country towns in Queensland provided with water supply systems (including six in the course of construction) constructed by municipalities chiefly from Government loans. The following statement gives particulars of all water supply systems, excluding Brisbane, for the year 1939-40 :—

### COUNTRY WATER SUPPLY SYSTEMS : QUEENSLAND.

*Cost of Construction to 30th June, 1940—£3,931,907.*

<i>Receipts.</i>			£	<i>Expenditure.</i>			£
Rates and sales of water	..	325,559		Office and salaries	..	25,770	
Government and other loans	..	230,230		Construction	..	290,910	
Government subsidy or loans	..	81,419		Maintenance	..	145,543	
Other	..	31,849		Interest and redemption	..	148,310	
				Other expenses	..	16,643	
<b>Total</b>			<b>669,057</b>	<b>Total</b>			<b>627,176</b>
<b>Assets</b>	..	..	<b>2,829,787</b>	<b>Liabilities</b>	..	..	<b>2,257,170</b>

(b) *Sewerage Systems.* At 30th June, 1940, there were eight cities outside the Metropolitan area—Bundaberg, Ipswich, Mackay, Maryborough, Rockhampton, Toowoomba, Townsville and Warwick—with sewerage works. Sewerage works are also in the towns of Charleville and Goondiwindi and in the shires of Paroo (Cunnamulla) and Quilpie. The works at Mackay, Maryborough, Rockhampton, Toowoomba, Cunnamulla and Quilpie are in operation, whilst those for the other cities were in course of construction at the end of the year.

4. *South Australia.*—(i) *General.* The water supply and sewerage systems in this State were constructed and are maintained by the Public Works Department.

(ii) *Adelaide Waterworks.* (a) *Summary.* The following table gives particulars for 1941-42, the figures for consumption being recorded by gaugings taken at the reservoirs including evaporation and absorption. There are 69,000 meters in the Adelaide District.

ADELAIDE WATERWORKS : SUMMARY.

Year.	Number of Assessments.	Annual Value.	Area Supplied.	Capacity of Reservoirs.	Length of Mains.	Annual Consumption.
1941-42 .. ..	No. 138,087	£ 5,881,216	Acres. 138,484	Million Gallons. 14,438	Miles. 1,427	Million Gallons. 9,688

(b) *Finances.* Particulars for the year 1941-42 are given below :—

ADELAIDE WATERWORKS : FINANCES.

Year.	Capital Cost.	Revenue.		Expenses.				Percentage of Net Revenue on Capital Cost.
		Rates.	Total.	Adminis- tration.	Mainten- ance.	Other.	Total.	
1941-42 ..	£ 4,825,981	£ 391,110	£ 501,490	£ 27,982	£ 71,419	£ 30,330	£ 129,731	% 7.70

(iii) *Adelaide Sewerage.* Particulars for 1941-42 are given hereunder :—

ADELAIDE SEWERAGE : SUMMARY.

Year.	Length of Sewers.	Number of Con- nexions.	Capital Cost of Revenue- Producing Works.	Revenue.		Working Expenses.		Percentage of Net Revenue on Capital Cost.
				Rates, etc.	Total.	Adminis- tration, Main- tenance, etc.	Total.	
1941-42 ..	Miles. 542	No. 57,153	£ 1,696,974	£ 193,885	£ 201,542	£ 33,488	£ 37,339	% 9.68

(iv) *Country Water Supply.* (a) *Summary.* The chief items of information regarding these undertakings are set forth in the table below for 1941-42. There are 37,000 meters in country districts.

#### COUNTRY WATERWORKS, SOUTH AUSTRALIA : SUMMARY.

Year.	Number of Assessments.	Area Supplied.	Capacity of Reservoirs.	Length of Mains.	Annual Consumption.
	No.	Acres.	Million Gallons.	Miles.	Million Gallons.
1941-42 .. ..	52,751	11,734,532	9,382	5,041	4,694

(b) *Finances.* The next table gives financial information for 1941-42 :—

#### COUNTRY WATERWORKS, SOUTH AUSTRALIA : FINANCES.

Year.	Capital Cost.	Revenue.		Working Expenses.				Percentage of Net Revenue on Capital Cost.
		Rates.	Total.	Adminis- tration.	Mainten- ance.	Other.	Total.	
	£	£	£	£	£	£	£	%
1941-42 ..	10,241,176	168,404	230,351	22,794	76,464	95,193	194,451	0.56

(v) *Other Sewerage Systems.* Information in summarized form is given below regarding the two suburban sewerage systems, namely, the Glenelg system and the Port Adelaide and Semaphore system, for 1941-42 :—

#### SUBURBAN SEWERAGE SYSTEMS, SOUTH AUSTRALIA : SUMMARY.

Year.	Length of Sewers.	Number of Con- nexions.	Capital Cost.	Revenue.		Working Expenses.		Percentage of Net Revenue on Capital Cost.
				Rates.	Total.	Adminis- tration and Main- tenance.	Total.	
	Miles.	No.	£	£	£	£	£	%
1941-42 ..	401	29,215	1,913,449	83,172	84,456	43,473	50,417	1.78

5. *Western Australia.*—(i) *General.* The water supply and sewerage systems of Western Australia are principally under the management of Government Departments, and are divided into the following categories :—(a) Metropolitan Water Supply, Sewerage and Drainage, covering Perth, Fremantle, Claremont, Guildford, Midland Junction and Armadale District; (b) Goldfields Water Supply; (c) Water Supply of other towns; (d) Agricultural Water Supply; and (e) Artesian and sub-artesian waters.

(ii) *Metropolitan Water Supply, Sewerage and Drainage.* (a) *General.* The sources of the Metropolitan water supply are the Canning Dam, Churchman Brook Reservoir, Victoria Reservoir, Armadale and Wongong Pipe Head Dams, and certain bores. The largest water supply project, the Canning Dam, with a capacity of 20,550 million gallons was completed during 1940.

The sewage treatment works of Perth and suburbs consist of primary sedimentation with separate sludge digestion and discharge of all effluent direct to the ocean. Fremantle treatment works consist of septic tanks with ocean outfall for effluent. Construction



works carried out during the year 1941-42 were chiefly in connexion with various Defence Department projects. At 30th June, 1942, the number of premises connected with sewers was 42,377.

(b) *Summary.* The following table gives particulars regarding water supply for 1941-42 :—

**METROPOLITAN WATER SUPPLY, WESTERN AUSTRALIA : SUMMARY.**

Year.	Estimated Population Supplied.	Number of Services.	Water Supplied.	Average Daily Supply.		Number of Meters.	Length of Mains
				Per Head.	Per Service.		
	No.	No.	'000 Gallons.	Gallons.	Gallons.	No.	Miles.
1941-42 ..	233,160	66,038	5,908,981	69.43	245.14	40,712	1,013

(c) *Finances.* The table hereunder gives separate information for the water supply and sewerage and drainage branches for 1941-42 :—

**METROPOLITAN WATER SUPPLY, AND SEWERAGE AND DRAINAGE, WESTERN AUSTRALIA : FINANCES.**

Year.	Water Supply.			Sewerage and Drainage.		
	Capital Cost.	Revenue.	Expenditure.	Capital Cost.	Revenue.	Expenditure.
	£	£	£	£	£	£
1941-42 ..	5,256,194	321,384	312,994	3,825,952	211,834	224,892

(iii) *Goldfields Water Supply.* The source of supply for the Coolgardie and adjacent goldfields as well as for the towns and districts on or near the pipeline is the Mundaring Reservoir, which has a capacity of 4,650 million gallons. This scheme is now linked by pipe-line with the Canning Dam. In 1941-42 the railways consumed 6 per cent., the mines 44 per cent., and domestic, etc., 50 per cent. of the supply. The following table gives details for 1941-42 :—

**GOLDFIELDS WATER SUPPLY, WESTERN AUSTRALIA : SUMMARY.**

Year.	Total Consumption.	Number of Services.	Length of Water Mains.	Capital Cost.	Revenue.	Expenditure.
	'000 gallons.	No.	Miles.	£	£	£
1941-42 ..	1,316,451	14,434	1,734	6,040,734	304,383	347,689

(iv) *Water Supply of Other Towns, etc.* (a) *Controlled by Public Works Department.* During 1941-42 water supplied to other towns and districts amounted to 354,917,000 gallons, distributed as follows :—Railways, 40,979,000 gallons; mines, 20,774,000 gallons; and 293,164,000 gallons to domestic and other consumers.

(b) *Controlled by Government Railways.* Consumption for year ended 30th June, 1942, was 384,578,000 gallons.

(c) *Water Boards not Controlled by Government.* During 1941-42 approximately 333 million gallons of water was supplied to an estimated population of 20,878.

(v) *Agricultural Water Supply.* During the year 1941-42, three wells were sunk and two tanks excavated. During the thirty-two years from 1st July, 1910, to 30th June, 1942, 551 tanks were built, 385 wells sunk, and 3,653 bores put down to a total depth of 199,038 feet. Of the bores put down, 555 yielded fresh and 323 stock water.

(vi) *Artesian and Sub-artesian Waters.* Up to 30th June, 1942, the total number of bores put down in search of artesian or sub-artesian water and in which water was struck was 284, ranging in depth from 30 to 4,006 feet. These figures include 52 bores sunk in the metropolitan area.

6. *Tasmania.*—(i) *Hobart Water Supply.* The cost of this undertaking to 30th June, 1942, was £764,126, but a considerable amount of reticulation work has been done out of revenue and not charged to capital account. The outstanding loans at 30th June, 1942, amounted to £555,230. At the same date the number of tenements supplied in the city and suburbs was 13,292 and the length of reticulation mains was 148 miles. The revenue for 1941-42 was £61,909.

(ii) *Hobart Sewerage System.* The revenue for the year ended 30th June, 1942, was £38,305. Up to that date 84.7 miles of sewers has been laid in connexion with the original city system at a cost of £224,283 and 8,970 tenements connected. Since the original city was sewerred, the municipalities of Queenborough and New Town have been included in the city, and are now being sewerred. In Queenborough 30.5 miles of sewers connecting with 1,913 tenements, have been constructed at a cost of £135,103. In New Town a total of 41.2 miles of sewers has been laid, and 2,206 properties connected. The cost to 30th June, 1942, including surveys and sewerage outfall, was £119,657.

## § 5. Harbour Boards and Trusts.

1. *New South Wales.*—(i) *Maritime Services Board of New South Wales.* (a) *General.* The port of Sydney is administered by the Maritime Services Board of New South Wales, a corporate body of five Commissioners, three of whom are full-time members and two, representing shipping and commercial interests, part-time members. The Board was brought into existence on 1st February, 1936, by the Maritime Services Act, 1935, in order to co-ordinate the port and navigation services of the State, which had previously been administered by the Sydney Harbour Trust and by the State Department of Navigation.

(b) *Port of Sydney.* The functions of the Board in respect of the Port of Sydney include the provision of adequate wharfage, channels, lights and other port facilities, the control of shipping, pilotage, the imposition and collection of rates and charges on goods and vessels, the licensing of harbour craft and the general management and control of the Port.

The entrance to Sydney Harbour is nearly a mile wide, and is not less than 80 feet deep. Between the entrance, known as "The Heads", and the Harbour proper, a distance of 4 miles, there are two separate channels, each with a depth of 40 feet at low tide and a width of 700 feet. The foreshores are 188 miles in length, and the total area of the port is 14,284 acres, or 22 square miles, of which about one-half has a depth of 30 feet or more at low water ordinary spring tide. The mean range of tides is 3 feet 6 inches.

Excluding ferry wharves and jetties used for private purposes, there are 68,103 feet of wharfage controlled by the Maritime Services Board, and 9,928 feet of commercial wharfage privately owned. There is ample shed accommodation, and the port is well equipped with railway wharfage for the handling of traffic which is required to pass direct from ship to rail and vice versa. For the wheat export trade, in both bulk and bags, ample wharfage accommodation and handling equipment of the most modern character are available. Special facilities for the storage and handling of other staple products such as wool etc., are provided on the waterside and modern plant has been installed at Balls Head for replenishing ships' bunkers with oil or coal. Facilities in all directions can be very considerably extended when required. Approximately two-thirds of the shipping wharves controlled by the Board are leased to shipping companies; the remainder, which are unleased, are directly maintained by the Commissioners.

The following table gives particulars of the finances of the Board for 1941-42 in respect of the functions of the former Sydney Harbour Trust at the Port of Sydney :—

**MARITIME SERVICES BOARD : FINANCES OF THE PORT OF SYDNEY.**

Year.	Revenue.				Working Expendi- ture.	Interest, Sinking Fund, Exchange.	Surplus.	Total Capital Debt.
	Wharfrage and Tranship- ment Rates.	Tonnage Rates and Berthing Charges.	Other Sources.	Total.				
	£	£	£	£	£	£	£	£
1941-42	687,278	87,579	417,771	1,192,628	392,791	547,754	252,083	611,201,402

(a) Includes £57,328 exchange and £72,149 sinking fund contributions.

(b) After allowing for balance in liquidation of Capital Debt Account.

(c) *Port of Newcastle.* Newcastle Harbour is administered by the Maritime Services Board and an advisory committee consisting of five members appointed by the Governor. In the volume of shipping entered, Newcastle ranks second in importance in New South Wales and fourth in Australia. It is primarily a coal-loading port, but its activities cover the shipment of general commodities. The wharfrage and other facilities of the port have been further improved and extended to meet the actual and the anticipated growth of trade with the expansion of industry in the district. Facilities are available for the shipment of wool, wheat and frozen meat, and a wharf is available for timber. A terminal elevator, which has been erected for the handling of bulk wheat, has enhanced the importance of Newcastle as an exporting centre.

(d) *Port Kembla.* The Navigation and Harbour and Tonnage Rates Acts are administered at Port Kembla by the New South Wales Department of Public Works on behalf of the Maritime Services Board. Port Kembla, which is sharing to an increasing extent in the shipping trade of the State, has an area of 330 acres, with depths ranging from 20 to 50 feet, and wharfrage accommodation has been provided for large ocean-going vessels. Being adjacent to the southern coalfields and a rapidly developing industrial centre, its trade is growing and a great future for the port is predicted.

(e) *Other Ports.* In addition to the ports of Sydney and Newcastle, the Board controls 29 outports along the coastline of 609 miles.

(ii) *Port Charges.* There has been much ill-informed criticism of the port charges levied upon shipping in Australian ports. The fact is that the Governmental charges compare favourably with those of other parts of the world when the services rendered are taken into consideration. They are much lower than the charges at the leading ports of the United Kingdom. Direct comparisons of port charges are difficult, if not impossible, to make, because of the differing port customs, and the absence of similarity in the nature and methods of applying them. It is considered that the most satisfactory method of comparison is to take the total collections by the port authorities, and arrive at the average rate per ton. This has been done in the case of the two leading ports in Australia and in the United Kingdom, and the figures are as follows :—

**PORT CHARGES : AUSTRALIA AND UNITED KINGDOM.**

Port.	Net Tonnage of Vessels Entered.	Charges on Shipping (excluding Pilotage).	Average Rate per Ton of Shipping.
<b>Australia—</b>			
Sydney (1938-39) .. ..	11,650,317	£ 234,094	d. 4.8
Melbourne (1938) .. ..	8,578,270	210,432	5.9
<b>United Kingdom—</b>			
London (1938-39) .. ..	31,041,920	1,418,494	10.9
Liverpool (1938-39) .. ..	21,724,050	1,594,036	17.6

NOTE.—Later particulars are not available for publication.



2. *Victoria*.—(i) *Melbourne Harbour Trust*. (a) *General*. Information regarding the origin and constitution of this trust appears in Official Year Book No. 12, p. 970 *et seq.* At 31st December, 1942, the sheds available for wharfage accommodation had a length of 10,087 feet, covering an area of 1,300,204 square feet. The area of water in the bay and River Yarra under the control of the Trust is approximately 5,321 acres and the total length of wharves, piers and jetties in the port is 60,950 feet, giving an area of over 56 acres of wharfage, of which 51,409 feet is effective berthing space. During 1942 the quantity of material raised by dredging and excavation in the river and bay amounted to 2,161,865 barge yards at a cost of £137,653. The Trust has expended £377,518 in reclaiming land within its jurisdiction by depositing 18,555,093 barge yards of material thereon.

(b) *Finances*. During the year ended 31st December, 1942, the revenue (excluding refunds) of the Trust amounted to £985,095, and expenditure to £910,733 (including the amount of £168,539 paid to Consolidated Revenue and Geelong Harbour Trust). There was a net surplus on revenue account of £75,262. Appropriation for sinking fund and charges for depreciation, renewals and insurance against revenue account for the year amounted to £233,695. The capital expenditure for the year was £284,406. At 31st December, 1942, the total capital expenditure amounted to £9,480,085, the loan indebtedness at that date being £4,049,483.

(ii) *Geelong Harbour Trust*. The Geelong Harbour Trust was constituted in 1905, and reconstituted in 1934 under the provisions of the Melbourne and Geelong Harbour Trusts Act 1934. The Trust is under the control of three Commissioners appointed by the Governor in Council. Revenue for the year 1942 was £79,660. Revenue expenditure was £81,093 and capital expenditure £23,548, and loans outstanding at the end of that year amounted to £553,883.

(iii) *Harbour Boards*. The Harbour Boards Act 1928 made provision for the establishment of Harbour Boards at Gippsland Lakes, Weshpool, Warnambool, Port Fairy and Portland, all of which ports were, at the commencement of the operation of this Act, under the control of the Public Works Department. The Warnambool Harbour Board, which was constituted on 29th May, 1928, under the provisions of this Act, was abolished on 30th June, 1936, by Order in Council and the port was restored to the control of the Public Works Department.

3. *Queensland*.—(i) *Bowen Harbour Board*. The Bowen Harbour Board consists of seven members, of whom two are appointed by the Governor in Council and the remainder elected by the electors of the town of Bowen and adjacent shires. The district under its jurisdiction comprises the area within the boundaries of the town of Bowen, the shires of Proserpine and Wangaratta, and Division 1 of the shire of Ayr. The capital expenditure for 1942 was £500, while the revenue was £11,514 and the expenditure £11,153.

(ii) *Bundaberg Harbour Board*. The Bundaberg Harbour Board consists of nine members, of whom one is appointed by the Governor in Council, four are elected by the electors of the city of Bundaberg, and two each by the electors of the shires of Gooburrum and Woongarra.

The capital expenditure for the year 1942 was £3,664, while the revenue was £4,028 and expenditure £14,970. The fall in revenue was accounted for by a disastrous flood in February, 1942, which prevented navigation of the river.

(iii) *Cairns Harbour Board*. The Cairns Harbour Board, which controls the port, consists of thirteen members, representing the city of Cairns and six adjoining shires. The wharves are exclusively under the control of this Board and consist of 2,350 lineal feet in reinforced concrete, upon which spacious sheds are erected with a floor space of 101,770 square feet, brilliantly lighted by the Barron Falls Hydro Electricity Scheme. A most comprehensive electrical equipment is erected at the wharves for handling sugar from railway waggon or shed direct into vessels' holds and a special sugar storage shed, fitted with this equipment, can accommodate 7,500 tons. The Board's suction dredger maintains a minimum depth of 22 feet of water in the entrance channel. Ships drawing approximately 27 feet of water can berth at wharves. Railway facilities are provided in front of and at rear of the wharves. The gross revenue of the Board, derived from harbour,

berthage and miscellaneous dues, etc., for 1942 was £77,512 and expenditure £72,315. In addition £17,030 was spent from loans during the year on extension of wharves.

(iv) *Gladstone Harbour Board.* The Gladstone Harbour Board is composed of seven members, two of whom are appointed by the Governor in Council and five elected by the electors of the town of Gladstone and the shires of Calliope and Miriam Vale.

The capital expenditure for 1942 was £936 and the total to the end of 1942 amounted to £143,080. The revenue for 1942 was £10,848 and the expenditure £12,041.

(v) *Mackay Harbour Board.* The Mackay Harbour Board consists of nine members elected by the electors of the city of Mackay and the shires of Pioneer, Sarina, Mirani and Nebo.

Expenditure for 1942 totalled £201,812, of which £30,109 was spent on construction. Receipts totalled £97,490, harbour dues amounting to £92,049, Government loan to £7,864, and Government subsidy of loan to £15,548.

(vi) *Rockhampton Harbour Board.* The Rockhampton Harbour Board consists of eleven members, of whom seven are elected by the electors on the rolls of the city of Rockhampton, and the shires of Mount Morgan, Fitzroy and Livingstone. The remaining four are elected by the councillors of groups of inland shires.

The revenue for 1942 was £30,274, and the expenditure £34,215. The capital expenditure for 1942 was £1,508, and the total at the end of 1942 was £822,411.

(vii) *Townsville Harbour Board.* The Townsville Harbour Board is composed of nine members of whom two are appointed by the Governor in Council and the remaining seven are elected by the electors of Townsville and adjacent towns and shires. All harbour works and conveniences for the use of shipping are under the control of the Board. The capital expenditure for 1942 was £2,134; the revenue for 1942 was £97,352, and the expenditure £79,097.

(viii) *Queensland Harbour Boards Finances.* The following table shows details of the finances of all Harbour Boards for the year ended 31st December, 1942 :—

#### HARBOUR BOARDS, QUEENSLAND : FINANCES.

Year ended 31st December.	Revenue.		Expenditure.					Assets.	Liabilities.
	Wharfage and Harbour Dues.	Total.	Interest on Loans.	Redemption of Loans.	Construction and Maintenance.	Other.	Total.		
1942 ..	£ 222,025	£ 329,018	£ 54,789	£ 150,229	£ 209,330	£ 28,285	£ 442,633	£ 3,205,820	£ 2,680,931

4. *Western Australia.*—(i) *Fremantle Harbour Trust.* (a) *General.* Fremantle Harbour is controlled by a Board of five Commissioners appointed by the Governor in Council. A description of the works is given in a previous issue of the Official Year Book (see No. 12 p. 973). Since that account was written, bulk-handling facilities have been provided and the inner harbour, entrance channel and berthing accommodation have been dredged to a depth of 36 feet below the lowest known low water. The length of berthage accommodation at all the quays is now 10,177 feet.

(b) *Finance.* The following table gives financial details for 1941-42 :—

#### FREMANTLE HARBOUR TRUST : FINANCES.

Year.	Revenue.		Expenditure.					
		Working Expenses.	Interest.	Sinking Fund.	Renewals Fund.	Capital Expenditure.	Surplus Revenue. (a)	Total.
	£	£	£	£	£	£	£	£
1941-42 ..	579,712	336,361	145,671	22,101	2,000	4,586	17,572	528,291

(a) Paid to Consolidated Revenue.

(ii) *Bunbury Harbour Board.* (a) *General.* The Bunbury Harbour Board consists of five members appointed by the Government. The jetty is 4,900 feet long, with berthage accommodation of 3,700 feet, and is electrically lighted.

(b) *Finances.* Details for 1941-42 are given hereunder. Surplus revenue is paid into Consolidated Revenue Fund to meet interest and other charges:—

**BUNBURY HARBOUR BOARD : FINANCES.**

Year.	Capital Account.	Revenue.	Expenditure.	Interest.
	£	£	£	£
1941-42 .. ..	682,309	23,507	11,150	33,751

5. *Tasmania.*—(i) *Marine Board of Hobart.* (a) *General.* The Marine Board of Hobart consists of nine wardens elected by the ship-owners of the Port of Hobart and the importers and exporters of goods into or from any port within the jurisdiction of the Board.

(b) *Finances.* The following table gives details for 1941-42:—

**MARINE BOARD OF HOBART : FINANCES.**

Year.	Revenue.			Expenditure.		
	Capital Debt.	Taxes, Dues, etc.	Total.	Interest and Sinking Fund.	Works, Services, etc.	Total.
	£	£	£	£	£	£
1941-42 ..	11,605	42,641	47,458	2,631	42,860	49,812

(ii) *Marine Board of Launceston.* (a) *General.* The Marine Board of Launceston consists of five wardens, three elected by the ratepayers of the city of Launceston and two by ratepayers of the municipalities within the Tamar District.

(b) *Finances.* The following table gives details for 1941-42:—

**MARINE BOARD OF LAUNCESTON : FINANCES.**

Year.	Capital Debt.	Revenue.		Expenditure.		
		Taxes, Dues, etc.	Total.	Interest and Sinking Fund.	Works, Services, etc.	Total.
	£	£	£	£	£	£
1941-42 ..	195,630	45,926	50,910	14,569	32,626	50,933

(iii) *Marine Board of Burnie.* The length of the breakwater is 1,250 feet, with a depth up to 42 feet at low water, and a wharf alongside, 736 feet in length by 91 feet wide, with a depth at low water from 30 to 40 feet. There are two other timber wharves 700 feet and 520 feet long with depths of 20 to 26 feet and 26 to 30 feet respectively. The receipts for the year 1941-42 were £30,123, and the expenditure £29,662, including £18,133 interest on loans, etc.



## § 6. Fire Brigades.

1. *New South Wales.*—(i) *General.* Under the Fire Brigades Act, 1909-1941, a Board of Fire Commissioners consisting of eight members operates, and 130 fire districts have been constituted. The cost of maintenance of fire brigades is borne in proportions of quarter, quarter, and half by the Government, the municipalities, and the insurance companies concerned, but the expenditure must be so regulated that the proportion payable by the councils in a fire district shall not exceed the amount obtainable from  $\frac{1}{4}$ d. in the £1 rate on the unimproved capital value of ratable land in the fire district; provided that the Board, with the consent of the Minister, and at the special request of the councils of the municipalities or shires constituting or forming part of a fire district or a majority in number of such councils may, as to that district, exceed the limit above provided.

(ii) *Board of Fire Commissioners of New South Wales.* At 31st December, 1942, the Board had under its control 80 fire stations in the Sydney fire district and 155 fire stations in the country fire districts. The Sydney fire district includes the City of Sydney and suburbs, and comprises a total area of 298 square miles. The revenue for the year 1942 was £582,377, made up as follows:—From the Government, £136,756; municipalities and shires, £136,756; fire insurance companies and firms, £273,512; and from other sources, £35,353. The disbursements for the year were £575,420.

2. *Victoria.*—(i) *General.* The Fire Brigades Act of 1928 provides for a Metropolitan Fire Brigades Board, and a Country Fire Brigades Board, each consisting of nine members. The income of each Board is derived in equal proportions from the Treasury, the municipalities and insurance companies.

(ii) *Metropolitan Fire Brigade Board.* On 30th June, 1942, the Board had under its control 42 stations. The total receipts for 1941-42 were £276,736, comprising contributions £205,273, receipts for services £46,379, and interest and sundries £25,084. The expenditure was £276,139, made up as follows:—Salaries (permanent staff) £141,906, interest and repayments of principal £22,040, and other expenditure, £112,193. The loan expenditure during the year was £8,223, and the loan indebtedness at the end of the year, £221,634.

(iii) *Country Fire Brigades Board.* At 30th June, 1942, there were 135 municipal councils and 111 insurance companies included in the operations of the Act. The brigades are composed chiefly of volunteers, but in the large centres a few permanent station-keepers and partially-paid firemen are employed. Complete fire-alarm systems are installed in 42 of the larger provincial cities and townships. There were 161 registered brigades at the end of June, 1942. For 1941-42 the revenue was £36,531 and the expenditure £37,772. There was no loan expenditure during the year and at the close of the year the loan indebtedness was £58,975.

3. *Queensland.*—(i) *General.* The Acts of 1920-1931 made provision for the retention of existing fire districts, and for the constitution of new districts. For each district there must be a Fire Brigades Board consisting of seven members, and the cost of maintenance of each brigade is proportioned as follows:—The Treasury two-sevenths, insurance companies three-sevenths, and local authorities two-sevenths. All volunteer fire brigades in a district must be registered.

(ii) *Fire Brigades Boards.* At 30th June, 1942, there were fire brigades in 38 towns. The total revenue for the year 1941-42 was £163,690, received mainly from the following sources:—Government £37,527, local authorities £35,693, insurance companies £53,409, and loans (Government and other), £33,170. The total expenditure for the year was £191,901, the chief items being salaries and wages £98,742, and interest and redemption of loans, £14,863.

4. *South Australia.*—The Fire Brigades Act 1936 provides for a Board of five members, and the expenses and maintenance of brigades are defrayed as to two-ninths by the Treasury, five-ninths by insurance companies, and two-ninths by the municipalities concerned. The contribution of the Treasury, however, is limited to £10,000 and if

two-ninths of the expenses and maintenance exceeds this amount five-sevenths of the excess is contributed by the insurance companies and two-sevenths by the municipalities. At the 30th June, 1942, there were altogether 27 fire brigade stations, and the total revenue for the year 1941-42 was £65,861.

5. **Western Australia.**—(i) *General.* Under the 1916 Act certain Municipal and Road Board Districts are constituted fire districts under the control of the Western Australian Fire Brigades Board. The income of the Board is derived as to two-ninths from Government, two-ninths from Local Government Authorities, and five-ninths from insurance companies.

(ii) *Western Australian Fire Brigades Board.* The whole of the brigades throughout the State are now controlled by the Western Australian Fire Brigades Board, and number 43. The revenue and expenditure for the year ended 30th September, 1942, were £70,164 and £68,723 respectively.

6. **Tasmania.**—(i) *General.* The municipal council of any municipality may, under the Act of 1920, petition the Government to proclaim the municipality or any portion of it to be a fire district, each district to have a Board of five members. The expenses of each Board are borne in equal proportions by contributions from the Treasury, the municipality concerned, and insurance companies insuring property within the district.

(ii) *Hobart Fire Brigade Board.* The revenue of the Board for the year 1942 amounted to £8,732.

## CHAPTER XIX.

### MANUFACTURING INDUSTRY.

NOTE.—Working proprietors are included in all cases in the “Number of Persons Engaged”.

#### § 1. Number of Factories.

1. Number of Factories in each State.—For statistical purposes, a “factory” was defined by the Conference of Statisticians in 1902 as any factory, workshop or mill where four or more persons are employed or power is used. The statistics which follow should be read in the light of this definition. The following table gives the number of factories in each State for the last five years :—

FACTORIES : NUMBER.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1937-38 ..	9,097	9,241	3,063	1,980	2,066	948	26,395
1938-39 ..	9,464	9,250	3,087	2,067	2,129	944	26,941
1939-40 ..	9,458	9,215	3,064	2,265	2,129	980	27,111
1940-41 ..	9,919	9,121	2,972	2,230	2,056	1,002	27,300
1941-42 ..	10,166	8,918	2,788	2,167	1,938	994	26,971

2. Number of Factories in Industrial Classes.—(i) *Australia*. The next table shows the number of factories in Australia during the last five years, classified in the industrial classes agreed upon by the Conference of Statisticians in 1930. This classification, which was introduced during 1930-31, superseded the grouping which had been in use since 1902. The definition of a factory adopted at the Conference of Statisticians in 1902 is, however, still used. Details in regard to some of the principal industries included in the table will be found in § 9 hereinafter.

FACTORIES : NUMBER IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
I. Treatment of Non-metalliferous Mine and Quarry Products .. .. .	548	564	559	576	517
II. Bricks, Pottery, Glass, etc. .. .. .	459	471	452	440	415
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease .. .. .	652	666	685	719	740
IV. Industrial Metals, Machines, Implements and Conveyances .. .. .	7,102	7,255	7,370	7,315	7,236
V. Precious Metals, Jewellery and Plate .. .. .	290	290	306	304	291
VI. Textiles and Textile Goods .. .. .	591	611	650	705	761
VII. Skins and Leather .. .. .	536	533	531	550	540
VIII. Clothing .. .. .	4,334	4,314	4,270	4,370	4,316
IX. Food, Drink and Tobacco .. .. .	4,982	5,202	5,201	5,314	5,218
X. Woodworking and Basketware .. .. .	2,771	2,822	2,778	2,781	2,801
XI. Furniture, Bedding, etc. .. .. .	1,113	1,110	1,152	1,121	1,035
XII. Paper, Stationery, Printing, Bookbinding, etc. .. .. .	1,790	1,810	1,800	1,810	1,744
XIII. Rubber .. .. .	302	299	299	283	269
XIV. Musical Instruments .. .. .	34	34	38	39	45
XV. Miscellaneous Products .. .. .	398	413	437	476	565
Total, Classes I. to XV. .. .. .	25,902	26,439	26,618	26,818	26,493
XVI. Heat, Light and Power .. .. .	493	502	493	482	478
Grand Total .. .. .	26,395	26,941	27,111	27,300	26,971

Although not the best index of manufacturing activity, the number of factories affords some indication of the development of secondary industries. Since the year 1931-32 the number of factories had shown an annual increase to a maximum of 27,300 in 1940-41. In the year 1941-42, a slight decrease was recorded.



(ii) *States, 1941-42.* The following table shows the number of factories in each State in 1941-42, classified according to the nature of the industry :—

**FACTORIES : NUMBER IN INDUSTRIAL CLASSES, 1941-42.**

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	Aust.
	No.	No.	No.	No.	No.	No.	No.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	191	156	44	55	48	23	517
II. Bricks, Pottery, Glass, etc. ..	192	104	37	43	26	13	415
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	352	230	39	60	38	21	740
IV. Industrial Metals, Machines, Implements and Conveyances ..	2,837	2,422	672	556	538	211	7,236
V. Precious Metals, Jewellery and Plate ..	91	125	22	23	23	7	291
VI. Textiles and Textile Goods ..	223	436	19	39	20	24	761
VII. Skins and Leather ..	241	184	47	32	28	8	540
VIII. Clothing ..	1,743	1,726	276	296	217	58	4,316
IX. Food, Drink and Tobacco ..	1,759	1,427	755	583	435	259	5,218
X. Woodworking and Basketware ..	994	709	464	166	198	270	2,801
XI. Furniture, Bedding, etc. ..	316	370	120	91	90	48	1,035
XII. Paper, Stationery, Printing, Book-binding, etc. ..	686	640	158	114	118	28	1,744
XIII. Rubber ..	96	79	34	27	19	14	269
XIV. Musical Instruments ..	16	18	3	5	3	..	45
XV. Miscellaneous Products ..	291	182	34	30	24	4	565
Total, Classes I. to XV. ..	10,028	8,808	2,724	2,120	1,825	988	26,493
XVI. Heat, Light and Power ..	138	110	64	47	113	6	478
Grand Total ..	10,166	8,918	2,788	2,167	1,938	994	26,971

**§ 2. Classification of Factories according to Number of Persons Engaged.**

1. *States, 1941-42.*—The following table shows, for each State, the number of factories classified according to the number of persons engaged in 1941-42 :—

**FACTORIES : CLASSIFICATION ACCORDING TO SIZE OF FACTORY, 1941-42.**

No. of Persons Engaged in each Factory.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
<b>NUMBER OF FACTORIES.</b>							
Under 4 ..	3,207	2,935	906	615	904	298	8,865
4.. ..	929	658	272	213	166	114	2,352
5 to 10 ..	2,524	2,092	710	619	413	361	6,719
11 to 20 ..	1,365	1,236	376	298	184	99	3,558
21 to 50 ..	1,190	1,115	277	248	182	74	3,086
51 to 100 ..	447	425	108	90	60	29	1,159
Over 100 ..	504	457	139	84	29	19	1,232
Total ..	10,166	8,918	2,788	2,167	1,938	994	26,971

Some marked changes have taken place during the past decade in the distribution of factories according to the number of persons engaged. In 1931-32 of a total of 21,657 factories reported, 10,367, or 47.87 per cent., had less than five persons engaged whereas in 1941-42 the number of such factories had increased to 11,217, representing only 41.59 per cent. of the total of 26,971 factories. The increase in the number of small factories is due to the inclusion of small repair establishments (boots and shoes, cycles and motors, etc.) which are technically accounted as factories by the installation of some power machine.

Factories with more than 100 persons engaged has advanced rapidly from 547 in 1931-32 to a new high level of 1,232 in 1941-42, the persons engaged in these factories increasing from 145,886, or 41.65 per cent. of the total number, to 428,127, or 58.36 per cent., during the same period.

The relative importance of large and small factories is conclusively illustrated by a classification of the average number of persons engaged according to the size of factory in which they work :—

### FACTORIES : CLASSIFICATION OF PERSONS ENGAGED ACCORDING TO SIZE OF FACTORY, 1941-42.

No. of Persons Employed in Group.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
AVERAGE NUMBER ENGAGED DURING PERIOD WORKED.							
Under 4 ..	6,491	5,540	1,858	1,318	1,654	672	17,533
4..	3,716	2,632	1,088	852	664	456	9,408
5 to 10 ..	17,390	14,964	4,905	4,282	2,817	2,488	46,846
11 to 20 ..	19,908	18,282	5,469	4,427	2,709	1,462	52,257
21 to 50 ..	37,810	35,633	8,530	7,879	5,749	2,293	97,894
51 to 100 ..	31,834	29,495	7,556	6,345	4,390	1,924	81,544
Over 100 ..	184,971	153,256	33,054	40,977	6,898	8,971	428,127
Total ..	302,120	259,802	62,460	66,080	24,881	18,266	733,609
Av. per F'cty	29.72	29.14	22.40	30.50	12.84	18.37	27.20

2. Australia, 1937-38 to 1941-42.—In the following table factories in Australia during each of the last five years are classified according to the number of persons engaged.

### FACTORIES : CLASSIFICATION ACCORDING TO NUMBER OF PERSONS ENGAGED, AUSTRALIA.

Year.	Establishments Employing on the Average—							
	20 and under.		21 to 100.		101 and upwards.		Total.	
	Es- tablish- ments.	Persons en- gaged.	Es- tablish- ments.	Persons en- gaged.	Es- tablish- ments.	Persons en- gaged.	Es- tablish- ments.	Persons en- gaged.
1937-38—								
Number ..	21,514	126,585	3,921	166,064	960	273,502	26,395	566,151
Average per establishment ..	..	5.88	..	42.35	..	284.90	..	21.45
Percentage on total ..	81.50	22.36	14.86	29.33	3.64	48.31	100.00	100.00
1938-39—								
Number ..	21,982	129,505	4,013	170,971	946	272,022	26,941	572,498
Average per establishment ..	..	5.89	..	42.60	..	287.55	..	21.25
Percentage on total ..	81.59	22.62	14.90	29.86	3.51	47.52	100.00	100.00
1939-40—								
Number ..	22,057	128,659	4,054	171,732	1,000	293,933	27,111	594,324
Average per establishment ..	..	5.83	..	42.36	..	293.93	..	21.92
Percentage on total ..	81.36	21.65	14.95	28.89	3.69	49.46	100.00	100.00
1940-41—								
Number ..	22,022	127,776	4,170	176,714	1,108	352,582	27,300	657,072
Average per establishment ..	..	5.80	..	42.38	..	318.21	..	24.07
Percentage on total ..	80.67	19.44	15.27	26.90	4.06	53.66	100.00	100.00
1941-42—								
Number ..	21,494	126,044	4,245	179,438	1,232	428,127	26,971	733,609
Average per establishment ..	..	5.86	..	42.27	..	347.51	..	27.20
Percentage on total ..	79.69	17.18	15.74	24.46	4.57	58.36	100.00	100.00

### § 3. Power Equipment in Factories.

1. **General.**—Statistics of power equipment in factories are now collected on a different basis to that used prior to 1936–37. Previously the statistics represented the “average horse-power used” in all factories, including Central Electric Stations, but in 1936–37 information was obtained in respect of the “rated horse-power” of engines ordinarily in use and of engines in reserve or idle, omitting obsolete engines. In addition the power equipment of Central Electric Stations was collected in greater detail. If duplication is to be avoided it is essential that some distinction should be made between Central Electric Stations and other classes of industries. In the following tables Central Electric Stations have been treated separately from other factories.

In para. 2 below, 1,263 factories are shown as using no power other than hand-power; the distribution of these factories among the various industries was as follows:—Lime, Plaster and Asphalt, 66; Other Metal Works, 55; Ready-made Tailoring and Clothing, 347; Dressmaking, 103; Millinery, 47; Bakeries, 158; Cabinet and Furniture Making, 31; All other industries, 456.

2. **Rated Horse-power of Engines in Factories other than Central Electric Stations.**—The following table shows the number of factories using steam, gas, oil, electricity, or water power, those using hand-power, and the rated horse-power of engines ordinarily in use and in reserve or idle during 1941–42:—

**FACTORIES(a) : RATED HORSE-POWER OF ENGINES, 1941–42.**

State.	Number of Establishments.			Rated Horse-power of Engines.	
	Using Power.	Others.	Total	Ordinarily in use.	In Reserve or Idle (omitting obsolete).
	No.	No.	No.	H.P.	H.P.
New South Wales ..	9,661	409	10,070	814,666	85,889
Victoria ..	8,456	391	8,847	536,878	96,179
Queensland ..	2,606	134	2,740	209,037	26,427
South Australia ..	1,972	151	2,123	157,600	18,370
Western Australia ..	1,683	146	1,829	71,101	7,459
Tasmania ..	958	32	990	76,476	10,626
Australia ..	25,336	1,263	26,599	1,865,758	244,950

(a) Excludes Central Electric Stations.

3. **Rated Horse-power of Engines Ordinarily in Use.**—(i) *According to Type in States.* Particulars of the types of engines ordinarily in use in each State and their rated horse-power are given in the next table:—

**FACTORIES(a) : TYPES AND RATED HORSE-POWER OF ENGINES ORDINARILY IN USE, 1941–42.**

Rated Horse-power of Engines ordinarily in use.									
State.	Steam.		Internal Combustion.			Water.	Motors driven by electricity.		Total. (b)
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		Purchased.	Own Generation. (c)	
		H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
N.S.W. ..	108,785	59,667	4,383	4,357	13,542	53	623,879	87,733	814,666
Victoria ..	38,382	39,551	3,738	4,927	10,442	1,313	438,525	43,803	536,878
Queensland ..	77,339	14,011	7,702	3,665	14,442	..	91,878	47,274	209,037
S. Aust. ..	7,467	6,712	4,388	2,293	8,918	10	127,812	11,594	157,600
W. Australia ..	9,112	56	2,783	1,701	7,040	..	50,409	4,355	71,101
Tasmania ..	3,642	2,017	17	2,929	587	192	67,092	8,647	76,476
Australia ..	244,727	122,014	23,011	19,872	54,971	1,568	1,399,595	203,406	1,865,758

(a) Excludes Central Electric Stations.

(b) Excludes particulars in column (c).



(ii) *Australia, 1937-38 to 1941-42.*—Details of the horse-power of the various types of engines in use are given for Australia since 1937-38 in the following table :—

**FACTORIES(a) : TYPES AND RATED HORSE-POWER OF ENGINES ORDINARILY IN USE, AUSTRALIA.**

Rated Horse-power of Engines ordinarily in use.									
Year.	Steam.		Internal Combustion.			Water.	Motors driven by electricity.		Total. (b)
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		Purchased.	Own Generation. (c)	
	H.P.	H.P.	H.P.	H.P.	H.P.		H.P.	H.P.	
1937-38	266,939	83,542	28,372	15,926	51,053	1,510	888,919	172,130	1,336,261
1938-39	268,409	81,149	32,914	17,970	55,800	1,616	1,017,911	179,889	1,478,769
1939-40	243,155	105,648	25,769	18,876	56,536	1,306	1,124,124	196,990	1,575,414
1940-41	248,230	111,057	24,042	18,612	57,204	1,610	1,267,185	205,541	1,727,940
1941-42	244,727	122,014	23,011	19,872	54,971	1,568	1,399,595	203,406	1,865,758

(a) Excludes Central Electric Stations.

(b) Excludes particulars in column (c).

(iii) *In Classes of Industry, 1941-42.* The next table shows the rated horse-power of engines ordinarily in use in the various classes of industry in each State during 1941-42 :—

**FACTORIES(a) : RATED HORSE-POWER OF ENGINES ORDINARILY IN USE, 1941-42.**

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
I. Treatment of Non-metallic ferous Mine and Quarry Products ..	42,086	26,252	7,736	4,672	4,832	8,926	94,504
II. Bricks, Pottery, Glass, etc. ..	26,057	18,973	3,622	4,384	2,973	833	50,812
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	31,951	45,079	4,213	26,387	6,750	573	114,953
IV. Industrial Metals, Machines, Implements and Con- veyances ..	415,992	134,418	38,696	59,960	15,875	16,643	681,584
V. Precious Metals, Jewellery and Plate ..	1,364	2,437	138	370	71	38	4,418
VI. Textiles and Textile Goods ..	26,333	50,781	2,812	5,597	949	3,934	90,106
VII. Skins and Leather ..	10,445	9,078	2,417	473	1,079	399	23,891
VIII. Clothing ..	10,469	13,374	1,320	1,170	814	186	27,342
IX. Food, Drink and Tobacco ..	117,899	93,486	107,367	29,448	20,209	7,049	376,058
X. Woodworking and Basket- ware ..	52,726	39,619	30,438	11,162	12,070	9,279	155,294
XI. Furniture, Bedding, etc. ..	9,031	8,634	3,100	2,510	1,618	760	25,053
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	31,946	51,792	5,056	7,780	2,946	26,876	126,396
XIII. Rubber ..	22,107	32,368	1,140	638	84	(u)	50,406
XIV. Musical Instruments ..	872	230	13	8	23	..	1,146
XV. Miscellaneous Products ..	6,586	5,299	119	484	257	178	12,923
Total, Classes I. to XV. ..	805,864	531,820	208,187	155,052	70,550	76,343	1,847,816
XVI. Gas Works ..	8,802	5,058	850	2,548	551	133	17,942
Grand Total ..	814,666	536,878	209,037	157,600	71,101	76,476	1,865,758

(a) Excludes Central Electric Stations.

4. Capacity of Engines and Generators installed in Central Electric Stations.—  
(i) *According to Type in Australia.* Particulars of the type and the capacity of engines and generators installed in Central Electric Stations in Australia in 1941-42 are given in the following table :—

CENTRAL ELECTRIC STATIONS : POWER EQUIPMENT, AUSTRALIA, 1941-42.

Particulars.		Capacity of Engines and Generators.						
		Steam.		Internal Combustion.			Water.	Total.
		Recipro- cating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		
Engines installed— Total installed	Rated H.P.	28,895	2,107,621	20,996	592	162,342	246,487	2,566,933
Generators installed— Kilowatt capacity— Total installed ..	K.W.	19,082	1,490,970	13,503	700	105,701	181,956	1,811,912
Effective capacity	"	16,477	1,334,010	11,824	650	97,874	156,840	1,617,675
Maximum load ..	"	11,321	1,148,196	9,860	462	71,830	159,869	1,401,538
Horse-power equivalent— Total installed ..	H.P.	25,580	1,998,720	18,101	938	141,698	243,921	2,428,958
Effective capacity	"	22,088	1,788,307	15,851	871	131,205	210,252	2,168,574
Maximum load ..	"	15,176	1,539,214	13,218	619	96,292	214,312	1,878,831

(ii) *States.* Details of the capacity of engines and generators installed in Central Electric Stations in each State are given in the next table for 1941-42.

CENTRAL ELECTRIC STATIONS : POWER EQUIPMENT, 1941-42.

Particulars.		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Engines installed	Rated H.P.	1,116,640	601,975	255,035	202,105	228,192	162,977	2,566,933
Generators installed— Kilowatt capacity— Total installed ..	K.W.	842,310	417,027	171,540	144,060	111,795	125,180	1,811,912
Effective capacity ..	"	738,533	400,312	134,715	113,451	99,884	100,750	1,617,675
Maximum load ..	"	608,248	386,984	99,890	119,618	72,108	114,690	1,401,538
Horse-power equivalent— Total installed ..	H.P.	1,129,150	559,045	229,958	193,119	149,867	167,810	2,428,958
Effective capacity ..	"	990,041	536,639	180,632	192,303	133,899	135,060	2,168,574
Maximum load ..	"	815,386	518,771	133,908	160,354	96,664	153,748	1,878,831

## § 4. Employment in Factories.

1. *Number Engaged.*—(i) *General.* All persons engaged in the manufacturing activities of a factory, including proprietors who work in their own business and "outworkers" (see par. 4 (ii) hereinafter) are counted as factory employees, while all those are excluded who are engaged in selling and distributing, such as salesmen, travellers, collectors, carters engaged solely on outward delivery of manufactured goods and retailing storemen. Employment has been classified as follows :—(i) Working proprietors; (ii) managers and overseers; (iii) accountants and clerks; (iv) engine-drivers and firemen; (v) skilled and unskilled workers in the factories, mills, or workshops; (vi) carters and messengers; and (vii) others.

Prior to the year 1928-29 employment in factories was computed by dividing the sum of the number engaged each week by the number of weeks worked. The figures, therefore, represented the average number engaged over the period worked, which,

for many factories, was less than a full year. Commencing with the year 1928-29 the figure represents the equivalent average number engaged over a full year of fifty-two weeks. The classification of factories according to the number of persons engaged (see § 2 *ante*), however, is still based on the old method, but for all other purposes the average number engaged over the full year is used.

(ii) *Australia, 1932-33 to 1941-42.* Particulars of the number employed, the increase in employment and the rate per cent. of such increase are given for years 1932-33 to 1941-42, in the following table :—

## FACTORIES : EMPLOYMENT, AUSTRALIA.

Year.	Males.			Females.			Persons.		
	Number Em- ployed.	Increase on previous year.	Rate per cent. on previous year.	Number Em- ployed.	Increase on previous year.	Rate per cent. on previous year.	Number Em- ployed.	Increase on previous year.	Rate per cent. on previous year.
	No.	No.	%	No.	No.	%	No.	No.	%
1932-33 ..	261,515	23,600	9.92	109,212	10,469	10.60	370,727	34,069	10.12
1933-34 ..	289,249	27,734	10.60	116,660	7,448	6.82	405,909	35,182	9.49
1934-35 ..	322,465	33,216	11.48	127,133	10,473	8.98	449,598	43,689	10.76
1935-36 ..	356,554	34,089	10.57	136,217	9,084	7.15	492,771	43,173	9.60
1936-37 ..	381,412	24,858	6.97	142,536	6,319	4.64	523,948	31,177	6.33
1937-38 ..	408,602	27,190	7.13	150,558	8,022	5.63	559,160	35,212	6.72
1938-39 ..	412,591	3,989	0.98	152,515	1,957	1.30	565,106	5,946	1.06
1939-40 ..	426,934	14,343	3.48	160,729	8,214	5.39	587,663	22,557	3.99
1940-41 ..	473,058	46,124	10.80	177,015	16,286	10.13	650,073	62,410	10.62
1941-42 ..	524,383	51,325	10.85	200,959	23,944	13.53	725,342	75,269	11.58

(iii) *States, 1937-38 to 1941-42.* The following table shows, for each year from 1937-38 to 1941-42, (a) the average number of persons (including both sexes of all ages) engaged in manufacturing industries in each State ; (b) for each State, the percentage of the total number engaged in Australia ; and (c) the number engaged per ten thousand of the mean population in each State and Australia.

## FACTORIES : EMPLOYMENT.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
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## AVERAGE NUMBER ENGAGED DURING FULL YEAR (52 WEEKS).

1937-38 ..	224,861	201,793	52,119	44,084	23,133	13,170	559,160
1938-39 ..	228,781	201,831	54,110	43,371	23,211	13,802	565,106
1939-40 ..	236,974	212,461	55,541	45,050	22,967	14,670	587,663
1940-41 ..	265,751	237,636	57,269	50,844	22,734	15,839	650,073
1941-42 ..	298,245	258,400	61,909	65,252	23,980	17,556	725,342

## PERCENTAGE ON AUSTRALIAN TOTAL.

	%	%	%	%	%	%	%
1937-38 ..	40.21	36.09	9.32	7.88	4.14	2.36	100.00
1938-39 ..	40.48	35.72	9.58	7.67	4.11	2.44	100.00
1939-40 ..	40.32	36.15	9.45	7.67	3.91	2.50	100.00
1940-41 ..	40.88	36.56	8.81	7.82	3.50	2.43	100.00
1941-42 ..	41.11	35.62	8.54	9.00	3.31	2.42	100.00



**FACTORIES: EMPLOYMENT—continued.**

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
PER 10,000 OF POPULATION.							
1937-38 ..	830	1,084	524	746	506	553	815
1938-39 ..	837	1,076	537	730	502	583	816
1939-40 ..	858	1,124	546	755	493	615	840
1940-41 ..	953	1,237	556	850	485	660	920
1941-42 ..	1,060	1,322	598	1,078	512	733	1,016

2. Rates of Increase, 1937-38 to 1941-42.—The percentage increase on the average number of persons engaged in the preceding year is shown below for each State from 1937-38 to 1941-42 :—

**FACTORIES: ANNUAL PERCENTAGE INCREASE OF PERSONS ENGAGED.**

Year."	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	%	%	%	%	%	%	%
1937-38 ..	7.85	5.44	8.09	8.29	1.86	5.94	6.72
1938-39 ..	1.74	0.02	3.82	-1.62	0.34	4.80	1.06
1939-40 ..	3.58	5.27	2.64	3.87	-1.05	6.29	3.99
1940-41 ..	12.14	11.85	3.11	12.86	-1.01	7.97	10.62
1941-42 ..	12.23	8.74	8.10	28.35	5.48	10.84	11.58

NOTE.—Minus sign (—) indicates decrease.

3. Persons Engaged in Classes of Industry.—(i) *Australia.* The following table gives the average number of persons engaged in factories under each industrial group in Australia for the years 1937-38 to 1941-42 :—

**FACTORIES: PERSONS ENGAGED IN INDUSTRIAL CLASSES, AUSTRALIA.**

Class of Industry.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
I. Treatment of Non-metalliferous Mine and Quarry Products .. ..	9,952	10,343	10,042	10,554	9,970
II. Bricks, Pottery, Glass, etc. ..	15,142	15,709	15,149	16,159	15,126
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease .. ..	18,835	19,816	23,779	32,528	47,019
IV. Industrial Metals, Machines, Implements and Conveyances .. ..	178,019	177,677	184,469	221,075	276,113
V. Precious Metals, Jewellery and Plate .. ..	3,761	3,726	3,886	4,046	3,708
VI. Textiles and Textile Goods .. ..	45,224	46,082	50,973	57,319	60,482
VII. Skins and Leather .. ..	10,437	10,767	11,490	12,737	12,629
VIII. Clothing .. ..	85,371	86,092	87,728	89,042	88,684
IX. Food, Drink and Tobacco .. ..	81,785	83,846	87,046	91,500	94,928
X. Woodworking and Basketware .. ..	31,117	30,739	31,615	33,851	35,129
XI. Furniture, Bedding, etc. .. ..	15,612	15,287	14,655	14,827	13,331
XII. Paper, Stationery, Printing, Book-binding, etc. .. ..	39,062	39,913	40,434	40,090	38,710
XIII. Rubber .. ..	7,534	7,502	7,843	8,431	9,022
XIV. Musical Instruments .. ..	441	451	474	524	532
XV. Miscellaneous Products .. ..	7,798	7,727	8,325	9,212	11,443
Total, Classes I. to XV. ..	550,090	555,677	577,908	641,895	716,826
XVI. Heat, Light and Power .. ..	9,070	9,429	9,755	8,178	8,516
Grand Total ..	559,160	565,106	587,663	650,073	725,342

From the employment levels reached in 1938-39 all industries, except "Furniture, Bedding, etc.", "Heat, Light and Power," have shown increases in the number employed until 1941-42 when the transfer of man-power to the more essential industries

became apparent. The greatest actual gain was 98,000 persons in "Industrial Metals, etc.", while the greatest relative gain was in "Chemicals, Dyes, etc." where the number engaged increased by 137 per cent.

(ii) *States.* Particulars of the numbers engaged in each industrial class are shown in the following table for each State:—

**FACTORIES : PERSONS ENGAGED IN INDUSTRIAL CLASSES, 1941-42.**

Class of Industry.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
I. Treatment of Non-metallic ferous Mine and Quarry Products .. .. .	4,448	2,742	882	894	596	408	9,970
II. Bricks, Pottery, Glass, etc. ..	8,405	4,193	759	1,110	197	162	15,120
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease .. .. .	10,593	24,961	1,577	8,850	925	113	47,010
IV. Industrial Metals, Machines, Implements and Convey- ances .. .. .	132,444	82,010	17,900	31,245	7,779	4,735	276,113
V. Precious Metals, Jewellery and Plate .. .. .	1,016	2,238	175	186	78	15	3,708
VI. Textiles and Textile Goods ..	21,049	31,309	1,591	2,560	778	3,195	60,482
VII. Skins and Leather .. .. .	5,618	4,566	1,110	633	490	182	12,620
VIII. Clothing .. .. .	34,367	38,151	6,970	5,412	3,104	671	88,681
IX. Food, Drink and Tobacco ..	32,055	31,052	16,990	7,304	1,145	3,376	91,928
X. Woodworking and Basketware	12,132	8,926	7,237	2,222	2,135	2,177	35,129
XI. Furniture, Bedding, etc. ..	5,350	4,286	1,505	1,117	959	354	13,331
XII. Paper Stationery, Printing, Bookbinding, etc. .. .. .	17,155	13,099	3,171	2,099	1,408	1,778	38,710
XIII. Rubber .. .. .	4,140	3,854	607	191	76	91	9,022
XIV. Musical Instruments .. ..	307	132	35	35	23	..	532
XV. Miscellaneous Products .. ..	5,691	4,503	338	472	272	167	11,443
<b>Total, Classes I. to XV.</b>	<b>294,770</b>	<b>256,022</b>	<b>61,039</b>	<b>64,333</b>	<b>23,265</b>	<b>17,397</b>	<b>716,826</b>
XVI. Heat, Light and Power .. ..	3,475	2,378	870	919	715	159	8,816
<b>Grand Total</b> .. .. .	<b>298,245</b>	<b>258,400</b>	<b>61,909</b>	<b>65,252</b>	<b>23,980</b>	<b>17,556</b>	<b>725,342</b>

4. Persons Engaged According to Nature of Employment.—(i) *General.* In the following table the average number of persons engaged in the States during 1941-42 are classified according to the nature of their employment:—

**PERSONS ENGAGED : NATURE OF EMPLOYMENT, 1941-42.**

State.	Average Number of Persons Engaged.						Total.
	Working Pro- priators.	Managers and Overseers.	Account- ants and Clerks.	Engine- drivers and Firemen.	Workers, Skilled & Unskilled. (a)	Carters, Messen- gers and Others.	
New South Wales..	8,129	10,333	20,283	3,652	253,684	2,164	298,245
Victoria .. .. .	7,399	8,738	15,478	2,102	222,492	2,191	258,400
Queensland .. ..	2,130	2,174	3,969	1,805	50,756	1,075	61,900
South Australia ..	1,549	2,094	4,967	513	55,635	494	65,252
Western Australia..	1,074	978	1,374	515	19,743	296	23,980
Tasmania .. .. .	622	828	1,088	318	14,552	148	17,556
<b>Australia</b> .. .. .	<b>20,903</b>	<b>25,145</b>	<b>47,159</b>	<b>8,905</b>	<b>616,862</b>	<b>6,368</b>	<b>725,342</b>

(a) Includes outworkers.

(ii) *Outworkers.* The term "outworker" or "homeworker" has acquired a special meaning in connexion with manufacturing industries, and technically embraces only those to whom work is given out by factory owners to be done in the employees' own

homes. Individuals working for themselves are not included. The following table gives particulars of the average number of outworkers employed by factories in each State during the last five years.

### FACTORIES : OUTWORKERS.(a)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1937-38 .. ..	234	152	8	23	6	12	435
1938-39 .. ..	201	120	6	11	7	11	356
1939-40 .. ..	174	143	6	18	4	8	353
1940-41 .. ..	164	173	9	6	4	7	363
1941-42 .. ..	469	191	10	17	4	11	702

(a) In all tables relating to number of hands employed in factories, outworkers are included.

The Factories Acts in each State contain provisions regulating the employment of outworkers. Records of outwork, specifying the names and remuneration of workers, and stating the places where the work is done, must be kept by factory proprietors.

5. Monthly Employment, 1938-39 to 1942-43.—The number of persons employed in factories (excluding Working Proprietors) on the pay-day nearest to the 15th of each month are shown in the following table for the years 1938-39 to 1942-43.

### FACTORIES : MONTHLY EMPLOYMENT, AUSTRALIA.

Month.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
MALES.					
July .. ..	387,693	391,470	421,089	490,902	513,162
August .. ..	389,979	393,076	427,112	494,850	514,096
September .. ..	391,576	395,446	434,217	499,050	515,149
October .. ..	393,977	404,730	438,885	504,981	516,056
November .. ..	395,192	409,933	448,281	509,788	516,918
December .. ..	394,438	412,509	454,126	510,778	516,834
January .. ..	385,742	407,380	451,616	503,012	516,844
February .. ..	392,056	409,120	460,459	505,247	518,768
March .. ..	395,146	413,524	471,038	508,998	521,302
April .. ..	391,005	412,465	468,684	509,635	521,975
May .. ..	393,609	407,379	478,905	509,506	520,966
June .. ..	390,973	413,157	482,522	508,994	520,679
Mean .. ..	391,780	405,849	453,078	504,645	517,729
FEMALES.					
July .. ..	147,282	148,252	162,419	187,842	212,392
August .. ..	149,294	150,966	165,414	190,269	213,100
September .. ..	151,159	153,129	169,027	187,555	214,123
October .. ..	152,473	157,054	172,079	195,690	216,418
November .. ..	152,806	159,323	174,499	198,168	218,026
December .. ..	151,165	158,182	176,536	198,704	220,328
January .. ..	141,853	155,328	172,147	195,851	220,838
February .. ..	151,883	161,744	179,065	201,727	223,988
March .. ..	154,854	165,672	182,128	204,725	227,681
April .. ..	152,614	164,409	179,948	204,892	229,748
May .. ..	150,693	162,144	181,462	205,860	228,203
June .. ..	148,601	160,408	183,230	206,035	228,600
Mean .. ..	150,390	158,051	174,830	198,110	221,120



FACTORIES: MONTHLY EMPLOYMENT, AUSTRALIA—*continued.*

Month.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
PERSONS.					
July .. ..	534,975	539,722	583,508	678,744	725,554
August .. ..	539,273	544,042	592,526	685,119	727,196
September .. ..	542,735	548,575	603,244	686,605	729,272
October .. ..	546,450	561,784	610,964	700,671	732,474
November .. ..	547,998	569,256	622,780	707,956	734,944
December .. ..	545,603	570,691	630,662	709,482	737,162
January .. ..	527,595	562,708	623,763	698,863	737,682
February .. ..	543,939	570,864	639,524	706,974	742,756
March .. ..	550,000	579,196	653,166	713,723	748,983
April .. ..	543,619	576,874	648,632	714,527	751,723
May .. ..	544,302	569,523	660,367	715,366	749,169
June .. ..	539,574	573,565	665,752	715,029	749,279
Mean .. ..	542,170	563,900	627,908	702,755	738,849

6. Distribution of Employees According to Age.—(i) *States.* The extension of statistics of employment in factories, decided upon at the Conference of Australian Statisticians held in March, 1937, now permits of a distribution of employees (excluding working proprietors) into three age-groups. The particulars are collected in June of each year and details showing the number employed in each age-group in June, 1942, are given below:—

FACTORIES: DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, JUNE, 1942.  
(Excluding Working Proprietors.)

State.	Under 16 Years.		16 and under 21 Years.		Adults.		Total.	
	No.	%	No.	%	No.	%	No.	%
New South Wales ..	9,793	3.33	57,537	19.57	226,626	77.10	293,956	100
Victoria .. ..	9,212	3.69	40,939	16.40	199,532	79.91	249,683	100
Queensland .. ..	4,029	6.55	13,375	21.73	44,132	71.72	61,536	100
South Australia .. ..	2,873	4.14	11,958	17.22	54,605	78.64	69,436	100
Western Australia .. ..	1,336	5.74	5,271	22.63	16,684	71.63	23,291	100
Tasmania .. ..	925	5.40	2,985	17.43	13,217	77.17	17,127	100
Australia .. ..	28,168	3.94	132,065	18.47	554,796	77.59	715,029	100

(ii) *Australia.* The following table shows the same age distribution in sexes for Australia since 1938:—

FACTORIES: DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, AUSTRALIA.  
(Excluding Working Proprietors.)

In June.	Under 16 Years.		16 and under 21 Years.		Adults.		Total.	
	No.	%	No.	%	No.	%	No.	%
MALES.								
1938 .. ..	16,480	4.21	77,309	19.74	297,830	76.05	391,619	100
1939 .. ..	16,109	4.12	76,418	19.55	298,446	76.33	390,973	100
1940 .. ..	17,077	4.13	81,016	19.61	315,064	76.26	413,157	100
1941 .. ..	16,871	3.50	86,296	17.88	379,355	78.62	482,522	100
1942 .. ..	16,135	3.17	68,507	13.46	424,352	83.37	508,994	100

**FACTORIES: DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE,  
AUSTRALIA—continued.**  
(Excluding Working Proprietors.)

In June.	Under 16 Years.		16 and under 21 Years.		Adults.		Total.	
	No.	%	No.	%	No.	%	No.	%
<b>FEMALES.</b>								
1938 .. ..	15,975	10.76	56,721	38.20	75,793	51.04	148,489	100
1939 .. ..	15,497	10.43	56,273	37.87	76,831	51.70	148,601	100
1940 .. ..	16,476	10.27	60,386	37.65	83,546	52.08	160,408	100
1941 .. ..	15,120	8.25	65,724	35.87	102,386	55.88	183,230	100
1942 .. ..	12,033	5.84	63,558	30.85	130,444	63.31	206,035	100
<b>PERSONS.</b>								
1938 .. ..	32,455	6.01	134,030	24.81	373,623	69.18	540,108	100
1939 .. ..	31,606	5.86	132,691	24.59	375,277	69.55	539,574	100
1940 .. ..	33,553	5.85	141,402	24.65	398,610	69.50	573,565	100
1941 .. ..	31,991	4.81	152,020	22.83	481,741	72.36	665,752	100
1942 .. ..	28,168	3.94	132,065	18.47	554,796	77.59	715,029	100

### § 5. Sex Distribution in Factories.

1. *Distribution of Persons Engaged According to Sex.*—(i) *General.* In New South Wales the ratio of the number of females engaged in factories to the number of males during 1886 was about one to seven; in 1891 one to six; in 1903 it became about one to four; and is now more than one to three. In Victoria the ratio of females to males during the year 1886 was about one to five. Five years later (1891) it was somewhat less, but in 1896 had increased to about one to three, and is now about one to two. In the remaining States the ratio was roughly one female engaged to every four males, but the increase of female workers in war-time industry has increased this ratio to just over one to three in all States except Queensland. For Australia as a whole the ratio has decreased slightly and is now about two females to five males.

(ii) *Average Number of Males and Females Engaged, 1937-38 to 1941-42.* The following table shows the average number of males and females engaged in factories in each State during the last five years:—

#### FACTORIES: MALES AND FEMALES ENGAGED.

State.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
<b>MALES.</b>					
New South Wales ..	164,391	167,172	172,259	194,194	216,850
Victoria .. ..	136,160	136,218	143,238	161,880	175,691
Queensland .. ..	42,337	43,941	45,026	46,567	49,095
South Australia ..	36,274	35,406	36,326	40,072	49,918
Western Australia ..	18,760	18,704	18,331	18,004	18,834
Tasmania .. ..	10,680	11,150	11,754	12,341	13,389
<b>Australia .. ..</b>	<b>408,602</b>	<b>412,591</b>	<b>426,934</b>	<b>473,058</b>	<b>524,383</b>
<b>FEMALES.</b>					
New South Wales ..	60,470	61,609	64,715	71,557	81,389
Victoria .. ..	65,633	65,613	69,223	75,756	82,709
Queensland .. ..	9,782	10,169	10,515	10,702	12,214
South Australia ..	7,810	7,965	8,724	10,772	15,334
Western Australia ..	4,373	4,507	4,636	4,730	5,146
Tasmania .. ..	2,490	2,652	2,916	3,498	4,167
<b>Australia .. ..</b>	<b>150,558</b>	<b>152,515</b>	<b>160,729</b>	<b>177,015</b>	<b>200,959</b>

2. Rate of Variation for each Sex.—The percentages of increase or decrease on the average numbers of males and females engaged in the preceding year are shown below for the years indicated :—

## ANNUAL PERCENTAGE INCREASES OF MALES AND FEMALES ENGAGED.

State.	1936-37— 1937-38.	1937-38— 1938-39.	1938-39— 1939-40.	1939-40— 1940-41.	1940-41— 1941-42.
MALES.					
	%	%	%	%	%
New South Wales .. ..	8.11	1.69	3.04	12.73	11.67
Victoria .. ..	5.98	0.04	5.15	13.01	8.53
Queensland .. ..	8.64	3.79	2.47	3.42	6.72
South Australia .. ..	8.60	— 2.39	2.60	10.31	24.57
Western Australia .. ..	1.59	— 0.30	— 1.99	— 1.78	4.61
Tasmania .. ..	6.22	4.40	5.42	4.99	8.49
Total .. ..	7.13	0.98	3.48	10.80	10.85

FEMALES.					
	%	%	%	%	%
New South Wales .. ..	7.15	1.88	5.04	10.57	13.74
Victoria .. ..	4.30	— 0.03	5.50	9.44	9.18
Queensland .. ..	5.80	3.96	3.40	1.78	14.13
South Australia .. ..	6.84	1.98	9.53	23.48	42.35
Western Australia .. ..	3.02	3.06	2.86	2.03	8.79
Tasmania .. ..	4.80	6.51	9.95	19.96	19.13
Total .. ..	5.63	1.30	5.39	10.13	13.53

NOTE.—The minus sign (—) indicates decrease.

3. Masculinity of Persons Engaged in Factories.—The extent to which females are engaged in the factories of Australia may perhaps be more clearly shown by giving the masculinity of persons engaged in each State. The following table shows particulars for the years 1937-38 to 1941-42 :—

## FACTORIES : MASCULINITY(a) OF PERSONS ENGAGED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1937-38 .. ..	271	207	433	464	429	429	271
1938-39 .. ..	271	208	432	445	415	420	271
1939-40 .. ..	266	207	428	416	395	403	266
1940-41 .. ..	271	214	435	372	381	353	267
1941-42 .. ..	266	212	407	326	366	321	261

(a) Number of males per 100 females.

For a number of years prior to 1926-27 there were on the average 300 males engaged in factories for every 100 females, but in that year the proportion of males began to fall with the increasing activity in the clothing and textile industries, in which the number of females to males is relatively high. As these trades were not so seriously affected by the depression as the heavier industries, the proportion of males continued to fall, until in 1932-33 there were only 239 males engaged to every 100 females. With the recovery of employment in the heavier industries subsequent to that year, the proportion of males per 100 females had increased to 271 in 1937-38, but fell again to 261 in 1941-42.

The decrease in masculinity since 1938-39 was the result of the enlistment of men in the armed services and the expansion of industry caused by the war. In many industries the younger men have been released for service in the defence forces and large numbers of women have been absorbed as an adjustment to the industrial effort of Australia.



4. **Employment of Females in Particular Industries.**—(i) *General.* The greater number of females in manufacturing industries are engaged in four classes, namely:—IV., Industrial Metals, Machines, etc.; VI., Textiles; VIII., Clothing; and IX., Food, Drink and Tobacco. In 1941-42 these industries accounted for 76.84 per cent. of all females in factories. In two classes only did the number of females exceed the number of males, namely, in Class VI., Textiles, where there were 158 females to every 100 males and in Class VIII., Clothing, with 296 females per 100 males. The following tables show the average number of males and females engaged in each of these classes in 1941-42:—

**MALES AND FEMALES ENGAGED IN PARTICULAR INDUSTRIES, 1941-42.**

Class.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>MALES.</b>							
IV. Industrial Metals, etc. ..	120,465	74,890	17,192	28,031	7,488	4,553	252,619
VI. Textiles and Textile Goods ..	7,471	12,313	600	1,376	379	1,332	23,471
VIII. Clothing ..	8,689	10,095	1,417	1,244	708	231	22,384
IX. Food, Drink and Tobacco ..	20,063	21,756	14,686	5,483	3,030	2,291	67,309
All Other Classes ..	60,168	56,637	15,800	13,784	7,229	4,982	158,600
Total ..	216,856	175,691	49,695	49,918	18,834	13,389	524,383
<b>FEMALES</b>							
IV. Industrial Metals, etc. ..	11,979	7,120	708	3,214	291	182	23,494
VI. Textiles and Textile Goods ..	13,578	18,996	991	1,184	399	1,863	37,011
VIII. Clothing ..	25,678	28,056	5,559	4,768	2,396	443	66,300
IX. Food, Drink and Tobacco ..	11,992	9,296	2,310	1,821	1,115	1,085	27,619
All Other Classes ..	18,162	19,241	2,646	4,947	945	594	46,535
Total ..	81,389	82,709	12,214	15,334	5,146	4,167	200,959

(ii) *Females Engaged in Clothing Trade.*—The employment of females in the several industries of Class VIII., Clothing, which is the most important group, and the relation of their number to that of the males so engaged are shown in the following table:—

**FEMALES ENGAGED IN EACH INDUSTRY IN CLASS VIII., 1941-42.**

Industry.	New South Wales.			Victoria.			Other States.		
	Males.	Females.	Femininity. (a)	Males.	Females.	Femininity. (a)	Males.	Females.	Femininity. (a)
Tailoring and Ready-made Clothing ..	1,985	11,349	572	1,780	6,907	388	1,099	5,258	478
Waterproof and Oil-skin Clothing ..	6	51	850	98	368	376	4	17	425
Dressmaking ..	31	1,504	4,852	576	7,639	1,326	64	2,413	3,770
Millinery ..	123	1,173	954	90	970	1,078	43	638	1,484
Shirts, Collars and Underclothing ..	364	4,425	1,216	278	3,406	1,225	154	2,113	1,372
Stays and Corsets ..	58	604	1,145	110	771	701	13	129	992
Handkerchiefs, Ties and Scarves ..	91	843	926	31	300	968	..	..	..
Hats and Caps ..	672	877	131	614	834	136	31	201	648
Gloves ..	29	114	393	98	330	337	..	..	..
Boots and Shoes ..	3,009	3,235	108	4,760	5,054	106	1,351	1,119	83
Boot Repairing (Including Bespoke Work) ..	1,106	58	5	638	18	3	497	39	8
Boot Accessories ..	240	166	69	160	172	107	4	..	..
Umbrellas and Walking Sticks ..	36	71	197	14	30	214	10	21	210
Dyeworks and Cleaning (including Renovating and Repairing) ..	871	819	97	762	842	110	329	616	187
Other ..	68	299	440	86	415	483	1	2	200
Total ..	8,689	25,678	296	10,095	28,056	278	3,600	12,566	349

(a) Number of females per 100 males.

## § 6. Child Labour in Factories.

1. **Conditions of Child Labour.**—The employment of young persons in factories in the States is regulated by Acts of Parliament, as is the case with the employment of female labour. The object of the restrictions imposed is to ensure amongst other things that a proper period shall be devoted to primary education, and that the early years of labour shall not exhaust the worker before the attainment of full growth.

2. **Average Number of Children Engaged, 1938 to 1942.**—In the returns for the various States, the term "child" denotes any person under sixteen years of age. Juvenile employment in factories reached a new peak in 1940, but declined during the next two years. The following table shows the number of children of each sex employed in manufacturing industries in June of the years 1938 to 1942.

### FACTORIES : CHILDREN ENGAGED, JUNE.

State.	1938.	1939.	1940.	1941.	1942.
MALES.					
New South Wales ..	6,032	5,759	6,164	5,901	5,125
Victoria ..	6,017	6,167	6,060	5,775	5,458
Queensland ..	1,835	1,790	2,068	2,113	2,526
South Australia ..	1,424	1,296	1,604	1,732	1,593
Western Australia ..	731	705	694	822	880
Tasmania ..	441	392	487	528	553
Australia ..	16,480	16,109	17,077	16,871	16,135
FEMALES.					
New South Wales ..	7,499	7,084	7,594	6,799	4,668
Victoria ..	5,279	5,005	5,276	4,664	3,754
Queensland ..	1,338	1,334	1,379	1,325	1,503
South Australia ..	1,050	1,053	1,303	1,303	1,280
Western Australia ..	450	521	507	553	456
Tasmania ..	359	500	417	416	372
Australia ..	15,975	15,497	16,476	15,120	12,033
TOTAL.					
New South Wales ..	13,531	12,843	13,758	12,700	9,793
Victoria ..	11,296	11,172	11,336	10,439	9,212
Queensland ..	3,173	3,124	3,447	3,438	4,029
South Australia ..	2,474	2,349	2,907	3,095	2,873
Western Australia ..	1,181	1,226	1,201	1,375	1,336
Tasmania ..	800	892	904	944	925
Australia ..	32,455	31,606	33,553	31,991	28,168

3. **Percentage of Children on Total Number of Persons Engaged.**—The following table shows the percentage of children on the total number of persons engaged in the various States for June of each of the five years 1938-1942. In 1942 the percentage was highest in Queensland and lowest in New South Wales.

**PERCENTAGE OF CHILDREN ON TOTAL NUMBER OF PERSONS ENGAGED.**  
(Excluding Working Proprietors.)

State.	June.				
	1938.	1939.	1940.	1941.	1942.
	%	%	%	%	%
New South Wales ..	6.16	5.85	5.96	4.64	3.33
Victoria ..	5.83	5.81	5.44	4.32	3.69
Queensland ..	6.27	6.01	6.37	6.26	6.55
South Australia ..	5.96	5.78	6.60	5.48	4.14
Western Australia ..	5.35	5.61	5.54	6.17	5.74
Tasmania ..	6.40	6.78	6.15	5.68	5.40
Australia ..	6.01	5.86	5.85	4.81	3.94

4. Industries Employing Child Labour.—The distribution of children employed in factories in June, 1942, and the percentage on the total number employed are given in the following table according to the class of industry:—

**FACTORIES : CHILDREN EMPLOYED, BY CLASSES, JUNE, 1942.**

Class of Industry.	Children Employed.		Total Number Employed.(a)		Percentage of Children on Total number employed.(a)	
	Males.	Females.	Males.	Females.	Males.	Females.
	No.	No.	No.	No.	%	%
I. Treatment of Non-metalliferous Mine and Quarry Products ..	151	8	8,505	353	1.78	2.27
II. Bricks, Pottery, Glass, etc. ..	345	45	10,766	1,331	3.20	3.38
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	396	484	32,693	20,744	1.21	2.33
IV. Industrial Metals, Machines, Implements and Conveyances	7,517	1,006	264,007	30,011	2.85	3.35
V. Precious Metals, Jewellery and Plate ..	144	39	2,161	792	6.66	4.92
VI. Textiles and Textile Goods ..	1,101	2,434	22,017	36,897	5.00	6.60
VII. Skins and Leather ..	242	301	8,475	2,931	2.86	10.27
VIII. Clothing ..	854	4,752	17,616	62,684	4.85	7.58
IX. Food, Drink and Tobacco	1,921	1,575	62,336	26,999	3.08	5.83
X. Woodworking and Basketware	1,310	72	29,814	1,464	4.39	4.92
XI. Furniture, Bedding, etc. ..	590	116	7,734	2,467	7.63	4.70
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	1,072	942	22,259	12,592	4.82	7.48
XIII. Rubber ..	87	44	4,983	2,443	1.75	1.90
XIV. Musical Instruments ..	17	9	299	118	5.69	7.63
XV. Miscellaneous Products ..	333	202	6,839	4,110	4.87	4.91
Total, Classes I. to XV. ..	16,080	12,029	500,504	205,936	3.21	5.84
XVI. Heat, Light and Power ..	55	4	8,490	99	0.65	4.04
Grand Total ..	16,135	12,033	508,994	206,035	3.17	5.84

(a) Excludes Working Proprietors.

5. Apprenticeship.—In all the States, Acts are in force for the regulation of the age at which children may be employed in gainful occupations. Legislative provision is also made for the regulation of apprenticeship under the various State Factories Acts or Arbitration Acts. These Acts, while laying down general principles, leave to the wages tribunals the actual determination of the conditions under which apprentices may be employed.



## § 7. Salaries and Wages Paid and Value of Production.

NOTE.—In all tables relating to Salaries and Wages paid in Factories the amounts drawn by working proprietors are excluded.

I. **General.**—The importance of the manufacturing industries of Australia is indicated by the fact that the total value of the output for 1941-42 was £773,058,971, of which amount £433,160,480 represented the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and £23,459,403 the value of the power, fuel and light used. The difference between the sum of the last two amounts and the value of the output, namely £316,439,028 represents the value of production as defined by the Conference of Statisticians at Sydney in 1925, i.e., "the value of consumable commodities produced during the year, deducting so far as possible, the value of goods consumed in process of production." The total amount of salaries and wages paid in factories in 1941-42 was £180,052,212. This figure, which excludes amounts drawn by working proprietors, shows an increase of £42,133,144 or 30.5 per cent. on that for the previous year.

2. **Salaries and Wages Paid.**—(i) *In Classes of Industry, 1941-42.* The amounts of salaries and wages paid in the various classes of industry in each State are shown in the following table:—

FACTORIES : SALARIES AND WAGES PAID, 1941-42.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,295,664	765,670	210,979	219,804	129,636	103,817	2,725,570
II. Bricks, Pottery, Glass etc. ..	2,144,828	1,058,572	164,408	267,663	108,936	29,840	3,774,247
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	2,537,236	7,116,497	383,386	2,386,775	242,449	22,107	12,688,450
IV. Industrial Metals, Machines, Implements and Conveyances ..	40,133,895	24,441,295	4,834,681	8,817,274	2,073,030	1,240,146	81,540,321
V. Precious Metals, Jewellery and Plate ..	224,470	523,678	30,242	30,974	15,800	2,155	827,319
VI. Textiles and Textile Goods ..	3,848,703	6,270,816	231,778	549,780	136,019	562,566	11,599,662
VII. Skins and Leather ..	1,332,994	1,139,160	268,518	100,811	107,980	10,535	3,001,998
VIII. Clothing ..	5,418,677	6,521,393	916,109	750,305	111,059	91,355	14,189,198
IX. Food, Drink and Tobacco ..	7,203,909	7,494,050	4,510,351	1,546,156	955,268	625,512	22,335,246
X. Woodworking and Basketware ..	2,801,768	2,206,725	1,471,441	506,407	581,560	421,628	7,989,529
XI. Furniture, Bedding, etc. ..	1,252,802	901,619	327,087	216,269	129,211	58,974	2,885,962
XII. Paper, Stationery, Printing, Book-binding, etc. ..	4,022,670	3,068,334	686,451	446,694	320,034	438,451	8,982,634
XIII. Rubber ..	1,007,144	1,061,827	112,899	35,086	11,007	7,817	2,326,380
XIV. Musical Instruments ..	76,156	32,002	8,704	5,645	5,645	..	123,152
XV. Miscellaneous Products ..	1,127,036	985,759	49,098	78,060	42,555	23,084	2,305,601
<b>Total, Classes I. to XV.</b>	<b>74,597,952</b>	<b>63,587,397</b>	<b>14,206,432</b>	<b>15,966,712</b>	<b>5,270,789</b>	<b>3,673,987</b>	<b>177,303,269</b>
XVI. Heat, Light and Power ..	1,159,704	775,880	270,336	267,452	228,779	46,792	2,748,943
<b>Grand Total</b>	<b>75,757,656</b>	<b>64,363,277</b>	<b>14,476,768</b>	<b>16,234,164</b>	<b>5,199,568</b>	<b>3,720,779</b>	<b>180,052,212</b>

(ii) *Totals and Averages, 1937-38 to 1941-42.* The following statement shows the total amount of salaries and wages paid, and the average amount paid per employee in each State, for each of the years 1937-38 to 1941-42. The average wage paid is not comparable with that shown in similar tables in issues of the Official Year Book prior to

No. 23, 1930, on account of the change in the method of computing the average number of hands employed, as explained earlier. The figures exclude working proprietors and the amounts drawn by them :—

### FACTORIES : TOTAL AND AVERAGE SALARIES AND WAGES PAID.

Year.	Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
		£	£	£	£	£	£	£
1937-38	Total amount paid ..	42,209,875	34,960,911	10,170,800	8,043,160	4,401,443	2,292,361	102,078,550
	Average per employee ..	194.24	180.33	204.73	189.10	200.92	183.33	189.80
1938-39	Total amount paid ..	44,606,497	36,026,542	10,887,229	8,169,350	4,573,558	2,479,886	106,743,062
	Average per employee ..	201.77	185.64	210.78	195.57	207.90	188.31	196.31
1939-40	Total amount paid ..	47,692,551	39,576,293	11,440,661	8,546,800	4,575,180	2,686,148	114,517,633
	Average per employee ..	207.94	193.31	215.48	197.31	210.67	191.39	202.24
1940-41	Total amount paid ..	57,759,532	49,796,607	12,163,763	10,418,901	4,720,563	3,059,702	137,919,068
	Average per employee ..	224.14	216.45	221.42	211.70	218.77	201.42	219.38
1941-42	Total amount paid ..	75,757,659	64,303,277	14,476,768	16,234,164	5,499,568	3,720,779	180,052,212
	Average per employee ..	261.13	256.43	242.17	254.84	240.09	219.72	255.60

In comparing the figures in the preceding table, regard should be paid to the nature of certain industries which are carried on to a greater extent in some States than in others. In Victoria, for instance, there is a large number of hands employed in Class VIII., comprising a high percentage of women and children. The highest average wages per employee in 1941-42 were paid in New South Wales, Victoria and South Australia in that order.

Since 1933-34 the average earnings per employee has risen each year and in 1940-41 and 1941-42 attained a record high level as a result of war-time conditions.

(iii) *Earnings of Males and Females, 1941-42.* The following table shows the approximate amount of salaries and wages paid to males and females in each class of industry in each State during the year 1941-42 :—

### SALARIES AND WAGES : MALE AND FEMALE FACTORY EMPLOYEES, 1941-42

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MALES.							
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,278,356	745,831	206,488	215,186	127,411	102,750	2,676,022
II. Bricks, Pottery, Glass etc. ..	2,041,664	1,003,287	158,790	262,614	105,191	29,093	3,600,639
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	2,048,604	5,534,889	208,905	1,777,032	228,331	20,637	9,908,398
IV. Industrial Metals, Machines, Implements and Conveyances ..	38,422,458	23,371,842	4,752,556	8,411,136	2,037,620	1,218,772	78,214,384
V. Precious Metals, Jewellery and Plate ..	193,250	450,536	27,080	28,051	14,989	2,074	715,980
VI. Textiles and Textile Goods ..	2,040,966	3,521,915	124,601	394,650	87,040	318,517	6,487,689
VII. Skins and Leather ..	1,151,668	982,290	251,134	67,113	97,325	45,355	2,595,185
VIII. Clothing ..	2,107,336	2,574,990	299,986	252,052	147,066	42,840	5,424,270
IX. Food, Drink and Tobacco ..	5,563,715	6,176,750	4,238,326	1,355,605	840,424	516,526	18,691,346
X. Woodworking and Basketware ..	2,717,990	2,160,990	1,436,805	493,447	578,558	415,995	7,803,785
XI. Furniture, Bedding, etc. ..	1,095,071	765,689	304,363	194,544	115,925	55,372	2,530,964
XII. Paper, Stationery, Printing, Book-binding, etc. ..	3,212,645	2,497,772	562,249	366,287	267,222	399,028	7,305,203
XIII. Rubber ..	379,361	874,079	78,221	30,517	10,722	6,959	1,879,859
XIV. Musical Instruments ..	61,031	30,830	8,704	5,268	5,045	..	111,478
XV. Miscellaneous Products ..	883,780	714,973	40,702	61,863	36,715	18,159	1,759,192
Total, Classes I. to XV.	63,697,895	51,406,663	12,788,910	13,918,665	4,700,184	3,192,077	149,704,394
XVI. Heat, Light and Power ..	1,152,220	773,521	270,330	266,822	227,954	46,427	2,737,280
Grand Total ..	64,850,115	52,180,184	13,059,246	14,185,487	4,928,138	3,238,504	152,441,674

SALARIES AND WAGES: MALE AND FEMALE FACTORY EMPLOYEES,  
1941-42—continued.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
FEMALES.							
I. Treatment of Non-metalliferous Mine and Quarry Products ..	£ 17,308	£ 19,839	£ 4,491	£ 4,618	£ 2,225	£ 1,067	£ 49,548
II. Bricks, Pottery, Glass, etc. ..	103,164	55,285	5,618	5,049	3,745	747	173,608
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	488,632	1,581,608	84,481	609,743	14,118	1,470	2,780,052
IV. Industrial Metals, Machines, Implements and Conveyances ..	1,711,437	1,069,453	82,125	406,138	35,410	21,374	3,325,937
V. Precious Metals, Jewellery and Plate ..	31,220	73,142	3,162	2,923	811	81	111,339
VI. Textiles and Textile Goods ..	1,807,737	2,748,901	107,177	155,130	48,979	244,049	5,111,973
VII. Skins and Leather ..	181,326	156,870	17,334	42,398	10,655	1,180	409,813
VIII. Clothing ..	3,391,341	3,946,403	616,423	498,253	263,993	48,515	8,764,928
IX. Food, Drink and Tobacco ..	1,640,194	1,317,300	272,025	190,551	114,844	108,986	3,643,900
X. Woodworking and Basketware ..	83,778	45,735	34,536	12,960	3,002	5,633	185,744
XI. Furniture, Bedding, etc. ..	157,731	135,930	22,744	21,725	13,286	3,602	354,998
XII. Paper, Stationery, Printing, Book-binding, etc. ..	810,025	570,562	124,202	80,407	52,812	39,423	1,677,431
XIII. Rubber ..	217,783	187,748	34,678	4,569	885	458	446,521
XIV. Musical Instruments ..	15,125	1,172	..	377	..	..	16,674
XV. Miscellaneous Products ..	243,256	270,786	8,396	13,206	5,840	4,925	546,409
Total, Classes I. to XV.	10,900,057	12,180,734	1,417,522	3,048,017	570,605	481,910	27,598,875
XVI. Heat, Light and Power ..	7,484	2,359	..	630	825	365	11,663
Total ..	10,907,541	12,183,903	1,417,522	3,048,677	571,430	482,275	27,610,538

(iv) *Total and Average Earnings of Males and Females, 1937-38 to 1941-42.*  
Particulars for the last five years are given in the table hereunder:—

## TOTAL AND AVERAGE SALARIES AND WAGES: MALES AND FEMALES.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MALES.							
1937-38. Amount paid ..£	36,247,087	28,241,058	9,287,319	7,381,141	3,997,197	2,067,231	87,221,033
Per cent. on total ..	85.87	80.78	91.31	91.77	90.82	90.18	85.45
Average per employee £	230.39	218.89	232.20	212.08	227.42	205.96	224.35
1938-39. Amount paid ..£	38,271,867	29,005,746	9,920,001	7,487,828	4,128,824	2,234,413	91,048,679
Per cent. on total ..	85.80	80.51	91.12	91.66	90.28	90.10	85.30
Average per employee £	239.24	224.47	238.59	220.95	235.49	212.09	231.84
1939-40. Amount paid ..£	40,807,966	31,799,741	10,411,458	7,763,251	4,118,683	2,404,041	97,305,140
Per cent. on total ..	85.56	80.35	91.00	90.83	90.02	89.50	84.97
Average per employee £	247.12	233.40	244.01	223.78	240.48	215.82	239.08
1940-41. Amount paid ..£	49,530,287	40,389,071	11,076,635	9,310,100	4,241,954	2,687,453	117,271,890
Per cent. on total ..	85.77	81.11	91.06	89.65	89.86	87.83	85.03
Average per employee £	265.35	260.54	249.91	242.30	251.14	220.34	258.77
1941-42. Amount paid ..£	64,850,115	52,180,184	13,059,210	14,185,187	4,928,138	3,238,504	152,441,674
Per cent. on total ..	85.60	81.07	90.21	87.38	89.61	87.04	84.67
Average per employee £	309.85	308.76	274.06	292.68	276.88	253.09	301.86



**TOTAL AND AVERAGE SALARIES AND WAGES: MALES AND FEMALES**  
—continued.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
<b>FEMALES.</b>							
1937-38. Amount paid .. £	5,962,788	6,719,853	883,481	662,019	404,246	225,130	14,857,517
Per cent. on total ..	14.13	19.22	8.69	8.23	9.18	9.82	14.55
Average per employee ..	99.41	103.62	91.25	85.65	93.36	91.26	99.69
1938-39. Amount paid .. £	6,334,630	7,020,796	967,228	681,522	444,734	245,473	15,694,383
Per cent. on total ..	14.20	19.49	8.88	8.34	9.72	9.90	14.70
Average per employee ..	103.66	108.25	96.00	86.44	99.58	93.19	103.92
1939-40. Amount paid .. £	6,884,585	7,776,552	1,029,203	783,549	456,497	282,107	17,212,493
Per cent. on total ..	14.44	19.65	9.00	9.77	9.98	10.50	15.03
Average per employee ..	107.20	113.55	98.71	90.85	99.45	97.41	108.09
1940-41. Amount paid .. £	8,220,215	9,407,536	1,087,128	1,078,111	478,600	372,219	20,644,178
Per cent. on total ..	14.23	18.89	8.94	10.35	10.14	12.17	14.97
Average per employee ..	115.79	125.37	102.43	101.13	102.11	107.18	117.65
1941-42. Amount paid .. £	10,907,541	12,183,093	1,417,522	2,048,677	571,430	482,275	27,610,538
Per cent. on total ..	14.40	18.93	9.79	12.62	10.39	12.96	15.33
Average per employee ..	134.96	148.57	116.85	134.47	111.89	116.55	138.44

(v) *Managers, Overseers and Other Employees.* A further analysis of salaries and wages paid is given in the following table, the amounts paid to managers, overseers, etc., and those paid to other employees. As previously mentioned, amounts drawn by working proprietors are excluded in all cases:—

**SALARIES AND WAGES: MANAGERS, OVERSEERS, ETC., AND OTHER EMPLOYEES, 1941-42.**

Class of Industry.	Salaries and Wages Paid to—						
	Managers, Overseers, Accountants and Clerks.		All Other Employees.		All Employees.		
	Males.	Females.	Males.	Females.	Males.	Females.	Total.
	£	£	£	£	£	£	£
I. Treatment of Non-metaliferous Mine and Quarry Products ..	340,059	39,937	2,335,963	9,611	2,676,022	49,548	2,725,570
II. Bricks, Pottery, Glass, etc. ..	384,565	51,932	3,216,074	121,676	3,600,639	173,608	3,774,247
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	1,339,308	332,689	8,569,090	2,447,363	9,908,398	2,780,052	12,688,450
IV. Industrial Metals, Machines, Implements and Conveyances ..	8,837,061	1,313,301	69,377,323	2,012,636	78,214,384	3,325,937	81,540,321
V. Precious Metals, Jewellery and Plate ..	72,072	25,703	643,908	85,636	715,980	111,339	827,319
VI. Textiles and Textile Goods ..	1,043,513	272,458	5,444,176	4,830,515	6,487,680	5,111,973	11,599,653
VII. Skins and Leather ..	280,248	42,076	2,314,937	367,737	2,505,185	409,813	3,004,998
VIII. Clothing ..	737,216	157,826	1,087,054	8,307,402	5,124,270	8,764,928	14,189,198
IX. Food, Drink, and Tobacco ..	3,123,402	677,765	15,567,944	2,966,135	18,691,346	3,643,900	22,335,246
X. Woodworking and Basketware ..	765,656	124,503	7,038,129	61,241	7,803,785	185,744	7,989,529
XI. Furniture, Bedding, etc. ..	235,433	74,805	2,295,531	280,193	2,530,964	354,998	2,885,962
XII. Paper, Stationery, Printing, Book-binding, etc. ..	1,312,298	375,830	5,992,905	1,301,601	7,205,203	1,677,431	9,882,634
XIII. Rubber ..	336,502	71,907	1,543,357	374,614	1,879,859	446,521	2,326,380
XIV. Musical Instruments ..	18,793	6,270	92,685	10,404	111,478	16,674	128,152
XV. Miscellaneous Products ..	257,136	81,304	1,501,750	405,195	1,759,192	546,400	2,305,601
Total, Classes I. to XV.	19,083,562	3,948,006	130,620,832	23,050,860	149,704,394	27,598,875	177,303,269
XVI. Heat, Light and Power ..	455,152	11,010	2,282,128	653	2,737,280	11,663	2,748,943
Grand Total ..	19,538,714	3,959,016	132,902,960	23,651,522	152,441,674	27,610,538	180,052,212
Average paid per employee ..	418.35	154.65	289.99	136.06	301.86	138.44	255.60

3. Power, Fuel and Light Used.—(i) *In Classes of Industry, 1941-42.* The expenditure by factories on power, fuel and light is of considerable importance; in 1941-42 it amounted to £23,459,463, an increase of £3,736,756 as compared with the previous year. The following table shows the value of power, fuel and light used in the different classes of industry in 1941-42 :—

**FACTORIES : VALUE OF POWER, FUEL AND LIGHT USED (a), 1941-42.**

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	394,204	250,753	89,714	78,861	65,840	73,888	953,260
II. Bricks, Pottery, Glass etc. ..	594,795	412,410	56,073	113,075	46,314	12,227	1,234,894
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	370,112	603,521	39,524	321,453	55,761	4,488	1,394,859
IV. Industrial Metals, Machines, Implements and Conveyances ..	5,191,695	1,261,751	303,000	555,849	139,366	292,581	7,744,242
V. Precious Metals, Jewellery and Plate ..	9,879	19,859	1,137	2,790	440	172	31,277
VI. Textiles and Textile Goods ..	284,870	552,250	20,413	73,601	8,539	36,450	976,123
VII. Skins and Leather ..	123,192	68,178	28,115	4,267	13,316	5,539	271,907
VIII. Clothing ..	140,884	181,608	20,813	22,062	10,838	2,853	385,300
IX. Food, Drink and Tobacco ..	1,235,078	1,156,932	679,216	302,419	216,123	82,301	3,672,069
X. Woodworking and Basketware ..	191,254	123,314	76,690	25,916	41,666	28,420	487,260
XI. Furniture, Bedding, etc. ..	33,544	28,200	8,687	8,526	3,521	1,601	84,079
XII. Paper, Stationery, Printing, Book-binding, etc. ..	212,858	346,151	33,121	25,792	14,257	159,076	791,255
XIII. Rubber ..	113,261	181,965	12,076	4,901	1,358	1,140	314,707
XIV. Musical Instruments ..	5,947	1,294	39	34	43	..	7,357
XV. Miscellaneous Products ..	53,007	42,441	1,356	3,708	1,131	516	102,159
Total, Classes I. to XV.	9,660,580	5,260,927	1,370,274	1,542,254	618,513	704,200	18,456,808
XVI. Heat, Light and Power ..	2,268,233	883,652	544,813	523,756	780,715	1,486	5,002,655
Grand Total ..	11,228,813	6,144,579	1,915,087	2,066,010	1,399,228	705,716	23,459,463

(a) Includes value of lubricants and water.

(ii) *Values of Items, 1941-42.* The following table shows the values of the various items of power, fuel and light used in factories in each State during the year 1941-42 :—

**FACTORIES : VALUE OF ITEMS OF POWER, FUEL AND LIGHT USED, 1941-42.**

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
Coal ..	3,388,158	2,351,326	916,463	731,668	326,088	94,714	7,808,917
Coke ..	2,034,559	296,135	46,311	89,953	12,387	9,011	2,515,680
Wood ..	188,601	250,891	161,438	100,379	232,027	105,002	1,048,028
Other (Charcoal, etc.) ..	216,839	109,120	29,115	73,090	10,233	4,943	442,446
Fuel Oil ..	985,922	553,809	154,112	200,548	416,628	38,025	2,340,047
Gas ..	1,011,474	197,085	27,586	70,488	12,018	39,774	1,358,155
Electricity ..	2,625,350	1,801,741	379,073	630,449	210,977	374,826	6,052,410
Water and Lubricating Oil ..	777,820	583,666	200,989	160,435	118,840	42,715	1,884,465
Total ..	11,228,813	6,144,579	1,915,087	2,066,010	1,399,228	705,716	23,459,463

(iii) *Quantities, 1941-42.* The following table shows the quantities of certain items of power, fuel and light used in factories in each State during the year 1941-42 :—

**FACTORIES : QUANTITY OF POWER, FUEL AND LIGHT USED, 1941-42.**

Particulars.	Unit.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Coal ..	Ton	3,000,732	4,807,230	575,607	361,314	233,565	59,483	9,043,991
Coke ..	"	1,697,836	137,772	24,028	38,613	15,710	3,045	1,917,014
Wood ..	"	208,499	436,286	251,772	113,792	375,295	141,234	1,529,848
Fuel Oil ..	Gal.	30,238,453	15,051,093	3,151,943	5,354,426	9,701,324	1,028,656	64,025,895

(iv) *Total Value, 1937-38 to 1941-42.*—The next table gives the sums expended on power, fuel and light during the last five years :—

#### FACTORIES : VALUE OF POWER, FUEL AND LIGHT USED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
1937-38 ..	7,123,961	4,032,190	1,440,750	919,858	1,095,225	405,721	15,047,705
1938-39 ..	7,651,627	3,999,934	1,423,549	1,017,537	1,169,268	438,006	15,699,921
1939-40 ..	8,135,614	4,358,419	1,538,782	1,130,137	1,198,194	520,321	16,881,467
1940-41 ..	9,620,123	5,138,787	1,655,937	1,400,683	1,309,748	597,429	19,722,707
1941-42 ..	11,228,813	6,144,579	1,915,087	2,066,010	1,399,228	705,746	23,459,463

4. *Value of Materials Used.*—(i) *In Classes of Industry, 1941-42.* The value of materials used (which includes the value of containers, packing, etc., the cost of tools replaced and repairs to plant) in factories in Australia in 1941-42 was £433,160,480, representing 56.03 per cent. of the value of the final output (see par. 5). The following table shows the value of the materials used in various classes of industry in each State :—

#### FACTORIES : VALUE OF MATERIALS USED, 1941-42.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	3,947,205	1,226,639	499,441	301,385	197,924	184,946	6,357,540.
II. Bricks, Pottery, Glass, etc. ..	1,468,166	626,565	69,954	204,009	67,344	28,284	2,464,322
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	12,494,513	13,365,591	994,234	5,360,403	1,336,968	132,172	33,683,881
IV. Industrial Metals, Machines, Implements and Conveyances ..	81,247,420	30,755,195	6,519,160	13,428,214	2,145,957	2,035,204	136,131,150
V. Precious Metals, Jewellery and Plate ..	252,651	551,454	16,832	31,625	12,451	444	865,457
VI. Textiles and Textile Goods ..	11,631,949	16,209,440	875,808	1,839,233	365,994	1,459,437	32,381,861
VII. Skins and Leather ..	4,332,193	3,448,309	1,983,002	231,047	276,457	233,739	10,504,747
VIII. Clothing ..	11,162,994	14,063,003	1,693,078	984,996	732,320	98,235	28,734,686
IX. Food, Drink and Tobacco ..	40,793,444	41,220,999	31,933,461	8,035,121	5,588,346	2,754,508	130,325,879
X. Woodworking and Basketware ..	6,377,623	4,269,835	2,929,146	1,362,915	867,336	708,734	16,515,589
XI. Furniture, Bedding, etc. ..	2,604,669	2,169,773	538,026	422,257	257,819	83,691	6,076,235
XII. Paper, Stationery, Printing, Book-binding, etc. ..	7,181,740	5,908,220	718,305	540,819	359,665	589,449	15,298,198
XIII. Rubber ..	2,872,873	3,556,731	299,927	72,406	27,839	16,337	6,846,113
XIV. Musical Instruments ..	63,215	24,405	2,409	43	786	..	90,858
XV. Miscellaneous Products ..	1,627,333	1,576,201	63,512	144,884	48,422	14,610	3,474,962
Total, Classes I. to XV.	188,057,988	138,972,420	49,136,295	32,959,357	12,285,628	8,339,790	429,751,478
XVI. Heat, Light and Power ..	1,411,160	1,226,467	248,329	305,271	166,647	51,128	3,409,002
Grand Total ..	189,469,148	140,198,887	49,384,624	33,264,628	12,452,275	8,390,918	433,160,480

(ii) *Total Amount, 1937-38 to 1941-42.* The following table gives the values of materials used in factories for the last five years :—

#### FACTORIES : VALUE OF MATERIALS USED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1937-38 ..	122,591,463	88,129,145	39,595,695	21,469,924	9,986,441	5,470,744	287,243,412
1938-39 ..	120,501,795	82,971,608	42,596,049	20,308,797	9,603,657	5,321,540	281,303,446
1939-40 ..	134,453,735	95,917,551	46,241,222	22,162,881	10,081,364	6,219,944	315,076,697
1940-41 ..	161,252,339	115,209,347	46,936,189	25,283,544	11,498,304	6,978,120	367,157,852
1941-42 ..	180,460,148	140,198,887	49,384,624	33,264,628	12,452,275	8,390,918	433,160,480



5. Value of Output.—(i) *In Classes of Industry, 1941-42.* The value of the output of new goods manufactured and of repairs effected in factories of various classes in each State in 1941-42 is shown in the following table. The figures given represent not only the increase in value due to the process of manufacture, but include also the values of the raw materials and the power, fuel and light used. The difference between the sum of the values of the materials and the power fuel and light used, and the output is the real value of factory production (see par. 6).

### FACTORIES : VALUE OF OUTPUT, 1941-42.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	7,265,911	3,145,439	1,026,423	737,028	512,464	470,527	13,157,792
II. Bricks, Pottery, Glass, etc. ..	5,400,248	2,886,317	440,806	795,405	278,814	88,705	9,890,295
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	21,841,172	25,037,087	1,507,513	9,394,301	1,950,030	176,581	59,906,774
IV. Industrial Metals, Machines, Implements and Conveyances ..	146,553,109	67,969,927	13,635,464	25,538,503	5,506,875	4,544,436	263,748,314
V. Precious Metals, Jewellery and Plate ..	663,938	1,351,672	66,077	91,321	38,005	3,731	2,214,744
VI. Textiles and Textile Goods ..	18,858,285	28,205,495	1,341,061	2,736,904	580,623	2,589,375	54,311,743
VII. Skins and Leather	6,623,130	5,583,322	2,485,528	412,001	499,333	331,712	15,035,927
VIII. Clothing ..	20,318,554	25,469,702	3,157,967	2,176,732	1,382,459	249,078	52,754,492
IX. Food, Drink and Tobacco	62,200,538	59,291,002	41,851,122	11,483,878	8,168,435	4,067,540	187,152,515
X. Woodworking and Basketware ..	11,168,515	8,005,131	5,343,336	2,257,597	1,808,055	1,391,656	29,974,290
XI. Furniture, Bedding, etc. ..	4,635,168	3,891,886	1,046,695	788,424	486,669	174,935	11,023,777
XII. Paper, Stationery, Printing, Book-binding, etc. ..	14,953,481	12,101,259	1,899,543	1,307,348	979,644	1,928,451	33,160,726
XIII. Rubber ..	4,492,122	5,789,074	480,137	150,194	63,049	41,400	11,022,285
XIV. Musical Instruments ..	186,152	70,431	17,106	6,965	7,799	..	288,453
XV. Miscellaneous Products ..	3,772,750	3,194,970	151,485	291,957	122,694	52,550	7,586,406
Total, Classes I. to XV. ..	329,023,073	251,992,714	74,456,263	58,169,849	22,384,948	16,110,686	752,137,533
XVI. Heat, Light and Power ..	10,465,239	5,288,366	1,673,787	1,726,644	1,567,086	200,316	20,921,438
Grand Total ..	339,488,312	257,281,080	76,130,050	59,896,493	23,952,034	16,311,002	773,058,971

(ii) *Total, 1937-38 to 1941-42.* The following table shows the value of output in each State during the five years ended 1941-42 :—

### FACTORIES : VALUE OF OUTPUT.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1937-38 ..	214,883,557	157,050,725	59,639,403	36,239,937	19,643,960	11,321,559	498,779,141
1938-39 ..	218,419,313	152,967,611	63,321,073	35,005,264	19,548,511	11,158,205	500,419,977
1939-40 ..	239,198,656	174,304,401	68,753,142	37,696,538	20,307,286	12,993,294	553,253,317
1940-41 ..	285,916,850	200,348,845	70,230,464	43,600,329	21,824,974	13,867,446	641,794,908
1941-42 ..	339,488,312	257,281,080	76,130,050	59,896,493	23,952,034	16,311,002	773,058,971

6. **Value of Production.**—(i) *In Classes of Industry, 1941-42.* The value of production for any industry was defined at the Conference of Statisticians at Sydney in 1925 as "the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production".

In accordance with this definition, it was agreed that a deduction consisting of the costs of raw material, containers, power, fuel, light, lubricants, water, tools replaced, repairs to plant and depreciation should be made from the "value of output". All these deductions with the exception of depreciation are included in the items "value of materials used" and "value of fuel used" as defined above. On account of the difficulty experienced in securing accurate figures for depreciation, it was subsequently agreed that the particulars obtained should be published but that no deduction should be made on this account for the present. The value of production as given in the following tables is obtained, therefore, by deducting "value of materials used" and "value of fuel used" from the "value of the output".

The figure thus calculated is, however, not the net value of production. The deduction for depreciation, particulars of which are shown in § 8, par. 4, was estimated at £16,072,417 for 1941-42. Many miscellaneous expenses, such as insurance and advertising, have not been taken into account. Therefore, it must not be inferred that when wages and salaries are deducted from the value of production, the whole of the "surplus" is available for interest and profit.

The following table shows the value of production in 1941-42 in each State for the various classes of factories:—

#### FACTORIES : VALUE OF PRODUCTION, 1941-42.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,924,502	1,668,047	437,268	356,782	248,700	211,693	5,846,992
II. Bricks, Pottery, Glass, etc. ..	3,337,287	1,847,342	314,779	478,321	165,156	48,194	6,191,079
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	8,976,547	11,067,975	473,755	3,712,535	557,301	39,921	24,828,034
IV. Industrial Metals, Machines, Implements and Conveyances ..	60,113,994	35,952,981	6,813,304	11,554,440	3,221,552	2,216,651	119,872,922
V. Precious Metals, Jewellery and Plate	401,408	780,359	48,108	56,906	25,114	3,115	1,315,010
VI. Textiles and Textile Goods ..	6,941,466	11,443,805	444,840	824,070	206,090	1,093,488	20,953,759
VII. Skins and Leather ..	2,167,745	2,036,835	174,111	178,588	209,560	89,434	5,156,273
VIII. Clothing ..	9,008,676	11,224,731	1,444,076	1,169,674	639,301	147,988	23,634,446
IX. Food, Drink, and Tobacco ..	20,262,016	16,913,071	9,238,445	3,146,338	2,363,966	1,230,731	53,154,567
X. Woodworking and Basketware ..	4,599,638	3,611,982	2,337,500	868,766	899,053	654,502	12,971,441
XI. Furniture, Bedding, etc. ..	1,996,955	1,693,913	499,982	357,641	225,329	89,643	4,863,463
XII. Paper, Stationery, Printing, Book-binding, etc. ..	7,558,883	5,846,888	1,148,117	740,737	605,722	1,179,926	17,080,273
XIII. Rubber ..	1,595,988	2,050,378	174,134	73,187	33,852	23,926	3,861,465
XIV. Musical Instruments	116,990	44,732	14,658	6,888	6,970	..	190,238
XV. Miscellaneous Products ..	2,092,410	1,576,328	86,617	143,365	73,141	37,424	4,009,285
Total, Classes I. to XV.	132,004,505	107,759,367	23,949,694	23,668,238	9,480,807	7,066,636	303,929,247
XVI. Heat, Light and Power ..	6,785,846	3,178,247	880,645	897,617	619,724	147,702	12,509,781
Grand Total ..	138,790,351	110,937,614	24,830,339	24,565,855	10,100,531	7,214,338	316,439,028

(ii) *Total and Averages, 1937-38 to 1941-42.* The value of production and the amount per person engaged and per head of population are shown in the following table for the five years ended 1941-42 :—

FACTORIES : VALUE OF PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
VALUE.							
1937-38 ..	£ 85,168,133	£ 64,889,390	£ 18,602,958	£ 13,820,155	£ 8,562,294	£ 5,445,094	£ 196,488,024
1938-39 ..	90,265,891	65,996,069	10,301,475	13,678,930	8,775,586	5,398,659	203,416,610
1939-40 ..	96,609,307	74,028,431	20,073,138	14,403,520	9,027,728	6,253,029	221,295,153
1940-41 ..	115,044,388	89,000,711	21,044,338	16,016,102	9,010,922	6,291,888	257,914,349
1941-42 ..	138,799,351	110,937,614	24,830,339	24,565,855	10,100,531	7,214,338	316,430,028

PER PERSON ENGAGED.

1937-38 ..	£ 379	£ 322	£ 357	£ 313	£ 370	£ 413	£ 351
1938-39 ..	395	327	357	315	378	391	360
1939-40 ..	408	348	378	320	393	426	377
1940-41 ..	433	375	378	333	397	397	397
1941-42 ..	465	429	401	376	421	411	436

PER HEAD OF POPULATION.

1937-38 ..	£ 31.44	£ 34.87	£ 18.69	£ 23.40	£ 18.73	£ 23.17	£ 28.62
1938-39 ..	33.02	35.20	19.17	23.01	18.97	22.79	29.36
1939-40 ..	34.97	39.18	20.60	24.12	19.36	26.20	31.65
1940-41 ..	41.26	46.34	21.01	28.29	19.25	26.21	36.49
1941-42 ..	49.35	56.77	23.99	40.00	21.56	30.14	44.34

7. *Value of Output and Cost of Production.*—As the total value of the output for Australia for 1941-42 was estimated at £773,058,971, there remained, after payment of £433,160,480, the value of the materials used, of £180,052,212 for salaries and wages, and of £23,459,463 for power, fuel and light, the sum of £136,386,816 to provide for all other expenditure, depreciation, interest and profits. The following table gives corresponding particulars for each State expressed absolutely and as percentages on the total value of the output for the year 1941-42 :—

FACTORIES : VALUE OF OUTPUT AND COST OF PRODUCTION, 1941-42.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	All other Expenditure, Interest, Profits, etc.	Total Value of Output.
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VALUE AND COST, ETC.

	£	£	£	£	£
New South Wales ..	180,460,148	11,228,813	75,757,056	63,032,695	339,488,312
Victoria ..	140,168,887	6,144,579	64,363,277	46,574,337	257,281,080
Queensland ..	49,384,624	1,015,087	14,476,708	10,353,571	76,130,050
South Australia ..	33,264,628	2,066,010	16,234,164	8,331,601	59,896,403
Western Australia ..	12,452,275	1,300,228	5,499,568	4,000,003	23,952,034
Tasmania ..	8,390,918	705,740	3,720,770	3,493,559	16,311,002
Australia ..	433,160,480	23,459,463	180,052,212	136,386,816	773,058,971

(a) Includes the value of containers, packing, etc., also the cost of tools replaced and repairs to plant.

(b) Includes lubricants and water.



FACTORIES: VALUE OF OUTPUT AND COST OF PRODUCTION, 1941-42—  
*continued.*

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	All other Expenditure, Interest, Profits, etc.	Total Value of Output.
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PERCENTAGE OF COSTS, ETC., ON TOTAL VALUE.

	%	%	%	%	%
New South Wales ..	55.81	3.31	22.31	18.57	100.00
Victoria ..	54.49	2.39	25.02	18.10	100.00
Queensland..	64.87	2.51	19.02	13.60	100.00
South Australia ..	55.54	3.45	27.10	13.91	100.00
Western Australia ..	51.99	5.84	22.96	19.21	100.00
Tasmania ..	51.44	4.33	22.81	21.42	100.00
Australia ..	56.03	3.04	23.29	17.64	100.00

(a) Includes the value of containers, packing, etc., also the cost of tools replaced and repairs to plant.  
(b) Includes lubricants and water.

### § 8. Value of Land, Buildings, Plant and Machinery.

1. General.—The following statement shows the value of land and buildings and of plant and machinery used in connexion with manufacturing industries during the year 1941-42 :—

FACTORIES: VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY, 1941-42.

Value of—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
Land and buildings	65,015,509	50,091,565	13,082,394	16,665,829	7,093,250	4,384,553	156,333,100
Plant and machinery	70,611,613	48,065,805	18,771,893	16,808,122	7,309,560	7,612,799	169,179,792
Total ..	135,627,122	98,157,370	31,854,287	33,473,951	14,402,810	11,997,352	325,512,892

The values recorded in this section are generally the values apportioned in the books of the individual firms after allowance has been made for depreciation. The totals shown in the table consequently do not represent the actual amount of capital invested in the items specified.

2. Value of Land and Buildings.—(i) *Total for Australia, 1937-38 to 1941-42.* The following table shows for Australia as a whole the approximate value of land and buildings occupied in connexion with manufacturing industries from 1937-38 to 1941-42 :—

FACTORIES : VALUE OF LAND AND BUILDINGS, AUSTRALIA.

Class of Industry.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,728,772	2,778,746	2,806,373	2,762,942	2,732,566
II. Bricks, Pottery, Glass, etc. ..	2,790,201	2,953,557	3,129,389	3,178,748	3,223,865
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease..	6,843,335	7,377,551	8,387,491	10,461,634	17,220,487
IV. Industrial Metals, Machines, Implements and Conveyances ..	32,420,428	34,841,028	35,853,507	39,329,041	42,677,884
V. Precious Metals, Jewellery and Plate ..	616,934	633,009	644,060	688,703	642,390
VI. Textiles and Textile Goods ..	5,754,347	5,999,671	6,432,183	6,892,471	7,591,893
VII. Skins and Leather ..	1,990,451	2,095,886	2,134,185	2,225,791	2,269,186
VIII. Clothing ..	10,350,944	10,623,619	10,650,856	11,035,281	11,244,302
IX. Food, Drink and Tobacco ..	31,953,396	33,273,248	34,136,115	35,325,688	35,999,042
X. Woodworking and Basketware ..	3,904,773	4,106,963	4,297,248	4,425,422	4,639,596
XI. Furniture, Bedding, etc. ..	2,440,997	2,533,254	2,562,861	2,653,043	2,543,193
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	9,956,433	10,639,315	10,945,294	11,514,735	11,519,651
XIII. Rubber ..	1,790,590	1,676,043	1,708,386	1,699,243	1,738,099
XIV. Musical Instruments ..	98,947	104,838	108,594	134,454	145,275
XV. Miscellaneous Products ..	1,396,371	1,432,857	1,535,993	1,620,870	1,981,221
Total, Classes I. to XV.	115,036,919	121,069,585	125,332,535	133,948,126	146,169,250
XVI. Heat, Light and Power ..	9,597,095	9,850,829	10,032,571	10,145,530	10,163,850
Grand Total ..	124,634,014	130,920,414	135,365,106	144,093,656	156,333,100

(ii) In Classes of Industry in States, 1941-42. The following table gives particulars of the various classes of industry in each State.

FACTORIES : VALUE OF LAND AND BUILDINGS, 1941-42.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,362,596	765,870	190,619	179,850	83,298	150,333	2,732,566
II. Bricks, Pottery, Glass, etc. ..	2,036,409	788,774	124,522	159,794	95,242	19,124	3,223,865
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	3,493,281	5,390,003	778,962	6,768,743	686,872	102,626	17,220,487
IV. Industrial Metals, Machines, Implements and Conveyances ..	21,249,283	12,528,965	2,367,577	3,527,069	1,934,324	1,070,666	42,677,884
V. Precious Metals, Jewellery and Plate ..	224,679	312,673	25,478	43,315	28,755	7,490	642,390
VI. Textiles and Textile Goods ..	2,651,511	4,061,668	118,334	357,044	94,871	308,465	7,591,893
VII. Skins and Leather ..	946,800	979,948	128,470	73,368	112,872	27,728	2,269,186
VIII. Clothing ..	4,902,516	4,653,326	562,821	560,659	456,105	108,875	11,244,302
IX. Food, Drink and Tobacco ..	13,213,619	10,603,138	6,137,718	2,883,991	2,040,202	1,120,374	35,999,042
X. Woodworking and Basketware ..	2,143,659	1,170,311	503,919	365,345	279,084	177,278	4,639,596
XI. Furniture, Bedding, etc. ..	996,585	926,714	275,485	157,934	135,546	50,929	2,543,193
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	4,705,065	3,844,621	952,604	786,316	537,101	693,944	11,519,651
XIII. Rubber ..	771,459	721,576	116,139	59,834	39,765	29,926	1,738,099
XIV. Musical Instruments ..	71,011	59,704	7,460	390	6,710	..	145,275
XV. Miscellaneous Products ..	960,179	793,432	53,300	102,576	49,140	22,594	1,981,221
Total, Classes I. to XV.	59,728,652	47,600,723	12,343,408	16,026,228	6,579,887	3,890,352	146,169,250
XVI. Heat, Light and Power ..	5,286,857	2,490,842	738,986	639,601	513,363	494,201	10,163,850
Grand Total ..	65,015,509	50,091,565	13,082,394	16,665,829	7,093,250	4,384,553	156,333,100

(iii) *Totals in each State.*—The following table shows the value of land and buildings in each State from 1937-38 to 1941-42 :—

### FACTORIES : VALUE OF LAND AND BUILDINGS.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1937-38 ..	54,471,643	40,339,541	11,982,620	8,370,334	6,471,367	2,089,509	124,634,014
1938-39 ..	57,353,625	42,026,245	12,299,089	8,710,700	6,813,653	3,717,102	130,920,414
1939-40 ..	58,039,150	43,791,176	12,459,458	9,539,249	6,863,468	3,775,605	135,365,106
1940-41 ..	61,880,528	47,062,751	12,504,215	11,480,505	6,802,488	4,237,100	144,093,656
1941-42 ..	65,015,500	50,091,505	13,082,394	16,665,829	7,093,250	4,384,553	150,333,100

Prior to 1929-30 the increase in the value of land and buildings was uninterrupted, rising from £23 million in 1903 to £118 million in 1929-30, a growth of £95 million in 27 years. During the three years ending 1932-33, however, there was a decline of £12 million to £105.8 million, but since that year the value has risen to £156.3 million in 1941-42.

3. *Value of Plant and Machinery.*—(i) *Total for Australia, 1937-38 to 1941-42.* The following table shows for Australia the approximate value of plant and machinery used in factories in each of the five years ended 1941-42 :—

### FACTORIES : VALUE OF PLANT AND MACHINERY, AUSTRALIA.

Class of Industry.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	6,504,872	7,028,382	6,765,086	6,553,067	6,175,931
II. Bricks, Pottery, Glass, etc. ..	3,019,476	3,144,586	3,090,862	2,978,633	2,975,457
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	6,251,926	6,754,248	7,863,905	10,872,160	14,856,820
IV. Industrial Metals, Machines, Implements and Conveyances ..	29,285,995	33,037,801	34,400,778	40,711,422	45,296,023
V. Precious Metals, Jewellery and Plate ..	196,652	197,059	200,507	210,133	207,010
VI. Textiles and Textile Goods ..	6,463,604	6,657,416	7,010,262	7,714,174	7,844,986
VII. Skins and Leather ..	900,239	973,181	1,022,965	1,095,683	1,143,210
VIII. Clothing ..	2,431,475	2,557,388	2,603,073	2,677,323	2,769,587
IX. Food, Drink and Tobacco ..	31,198,129	32,100,675	32,611,143	33,022,696	32,572,699
X. Woodworking and Basketware ..	3,759,553	3,907,551	4,079,562	4,230,650	4,388,014
XI. Furniture, Bedding, etc. ..	725,420	727,857	733,229	712,922	652,707
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	8,436,942	9,188,227	10,010,470	10,840,730	10,566,780
XIII. Rubber ..	1,470,300	1,367,859	1,393,609	1,472,249	1,437,977
XIV. Musical Instruments ..	10,750	11,702	11,422	15,127	19,861
XV. Miscellaneous Products ..	719,309	758,273	812,729	886,256	1,222,140
<b>Total, Classes I. to XV.</b>	<b>101,374,642</b>	<b>108,412,205</b>	<b>112,618,602</b>	<b>123,993,225</b>	<b>132,129,208</b>
<b>XVI. Heat, Light and Power</b>	<b>31,989,944</b>	<b>35,249,922</b>	<b>37,225,849</b>	<b>37,363,009</b>	<b>37,050,584</b>
<b>Grand Total</b>	<b>133,364,586</b>	<b>143,662,127</b>	<b>149,844,451</b>	<b>161,356,234</b>	<b>169,179,792</b>

In 1929-30 the amount invested in plant and machinery was £127.6 million, declining to £120.2 million during the next four years, but has since risen to the record figure of £169.2 million for 1941-42. The increase of £7.8 million recorded during the latter year was due to the development in the heavy industries included in Class IV. and in the Chemicals, Dyes, Explosives, etc., industries in Class III., as a result of war-time demands on these industries.



# VALUE OF PLANT AND MACHINERY.

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(ii) *Totals in each State.* The following table shows the value of plant and machinery in each State during the last five years. The chief increases during 1941-42 were recorded in Victoria, New South Wales and South Australia :—

## FACTORIES : VALUE OF PLANT AND MACHINERY.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1937-38 ..	57,222,693	36,868,289	17,734,600	9,402,792	7,459,525	4,676,687	133,364,586
1938-39 ..	62,692,956	38,626,743	18,095,415	9,749,679	8,095,064	6,402,270	143,662,127
1939-40 ..	64,801,584	40,905,886	18,217,831	11,106,194	8,025,068	6,787,888	149,844,451
1940-41 ..	68,533,346	44,985,756	18,501,758	14,391,653	7,394,680	7,549,041	161,356,234
1941-42 ..	70,611,613	48,065,805	18,771,893	16,808,122	7,309,560	7,612,799	169,179,792

(iii) *Value according to Industry, 1941-42.* The following table shows the value of plant and machinery used in factories in each State during 1941-42, classified according to industry :—

## FACTORIES : VALUE OF PLANT AND MACHINERY, 1941-42.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metaliferous Mine and Quarry Products ..	3,747,725	1,496,436	284,295	388,500	117,937	141,038	6,175,931
II. Bricks, Pottery, Glass, etc. ..	1,732,513	816,155	112,305	165,332	114,669	34,483	2,975,457
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	2,985,619	5,537,923	934,274	4,492,029	864,582	42,393	14,856,820
IV. Industrial Metals, Machines, Implements and Conveyances ..	25,577,532	10,145,163	2,321,738	4,763,507	1,047,154	1,440,929	45,296,023
V. Precious Metals, Jewellery and Plate ..	66,088	118,128	4,750	12,168	3,609	2,267	207,010
VI. Textiles and Textile Goods ..	2,742,131	4,077,500	133,133	553,674	90,140	212,102	7,844,080
VII. Skins and Leather ..	478,990	418,019	117,308	22,314	73,023	32,950	1,113,210
VIII. Clothing ..	1,040,041	1,234,816	169,881	187,180	117,154	20,515	2,709,587
IX. Food, Drink and Tobacco ..	9,976,088	7,501,771	10,859,017	1,888,618	1,617,747	729,458	32,572,699
X. Woodworking and Basketware ..	1,531,073	1,026,267	780,353	296,754	437,917	315,650	4,388,014
XI. Furniture, Bedding, etc. ..	255,157	206,041	76,745	58,098	39,222	17,444	652,707
XII. Paper, Stationery, Printing, Book-binding, etc. ..	4,109,584	3,480,136	501,903	714,696	281,089	1,388,178	10,566,780
XIII. Rubber ..	499,989	858,197	41,871	21,442	9,431	7,044	1,437,977
XIV. Musical Instruments ..	10,844	7,841	265	433	475	..	19,801
XV. Miscellaneous Products ..	645,692	509,599	13,422	26,573	16,287	10,567	1,222,140
Total, Classes I. to XV.	55,399,066	37,434,295	16,441,200	13,591,318	4,838,245	1,425,021	132,129,208
XVI. Heat, Light and Power ..	15,212,547	10,631,510	2,330,633	3,216,804	2,471,315	3,187,775	37,050,584
Grand Total ..	70,611,613	48,065,805	18,771,893	16,808,122	7,309,560	7,612,799	169,179,792

4. Depreciation of Land and Buildings and Plant and Machinery.—The following table shows the allowance made for the depreciation of land and buildings and plant and machinery used in connexion with the manufacturing industries in each State during the year 1941-42.

**ALLOWANCE FOR DEPRECIATION OF LAND AND BUILDINGS AND PLANT AND MACHINERY, 1941-42.**

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	533,175	114,854	36,732	14,799	12,579	13,853	725,992
II. Bricks, Pottery, Glass, etc. ..	194,465	81,127	9,205	17,182	10,923	1,939	314,841
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	308,178	710,062	73,401	385,149	59,870	6,009	1,542,669
IV. Industrial Metals, Machines, Implements and Conveyances ..	2,984,793	1,225,814	228,229	776,289	59,092	140,740	5,414,957
V. Precious Metals, Jewellery and Plate ..	5,379	8,986	420	763	260	207	16,015
VI. Textiles and Textile Goods ..	359,882	631,651	10,692	54,809	10,509	38,272	1,105,815
VII. Skins and Leather ..	42,256	43,639	8,715	2,796	5,962	4,314	107,682
VIII. Clothing ..	117,053	142,199	10,959	12,444	8,048	2,405	293,108
IX. Food, Drink and Tobacco ..	936,657	697,377	713,183	179,469	127,569	56,281	2,710,536
X. Woodworking and Basketware ..	158,736	103,692	64,366	31,268	37,335	26,279	421,676
XI. Furniture, Bedding, etc. ..	28,304	21,048	10,688	7,151	3,674	1,697	72,562
XII. Paper, Stationery, Printing, Book-binding, etc. ..	492,832	412,309	65,943	50,306	38,811	118,519	1,178,720
XIII. Rubber ..	107,951	113,488	6,540	3,080	1,183	996	233,238
XIV. Musical Instruments ..	1,779	599	8	24	47	..	2,457
XV. Miscellaneous Products ..	54,933	69,901	1,327	3,000	1,486	781	131,428
Total, Classes I. to XV.	6,326,373	4,376,746	1,240,408	1,538,529	377,348	412,292	14,271,696
XVI. Heat, Light and Power ..	1,075,724	210,515	187,827	143,380	90,883	92,392	1,800,721
Grand Total ..	7,402,097	4,587,261	1,428,235	1,681,909	468,231	504,684	16,072,417

### § 9. Individual Industries.

1. General.—The preceding pages afford a general view of the magnitude of industries in the sixteen groups adopted by the Conference of Statisticians in 1930. While it is not possible, within the limits of this work, to give a detailed account in respect of all industries, particular industries are dealt with hereunder which are of special importance by reason of the employment which they provide for labour and capital or other features of special interest. Where there are only one or two establishments of a particular industry in any State, details of output are not published, but are combined with some other factory group so that the operations of individual concerns will not be disclosed.

2. **Cement and Cement Goods.**—(i) *Details for each State, 1941-42.* The manufacture of cement and cement goods is an important industry included in Class I. and details for each State during 1941-42 are given in the following table :—

**CEMENT AND CEMENT GOODS, 1941-42.**

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	41	41	16	14	16	6	134
Number of persons engaged ..	1,207	1,278	608	481	364	124	4,152
Value of land and buildings ..	£ 611,741	£ 340,188	£ 153,924	£ 99,470	£ 33,056	£ 109,040	£ 1,353,719
Value of plant and machinery ..	£ 1,021,061	£ 682,479	£ 204,894	£ 302,867	£ 85,377	£ 84,263	£ 2,381,841
Wages paid ..	£ 238,765	£ 360,844	£ 142,829	£ 122,520	£ 85,044	£ 32,589	£ 1,104,129
Value of fuel used ..	£ 360,303	£ 142,036	£ 81,483	£ 69,710	£ 58,804	£ 36,216	£ 627,614
Value of materials used ..	£ 566,228	£ 576,085	£ 371,129	£ 189,783	£ 130,222	£ 77,436	£ 1,910,883
Total value of output ..	£ 1,690,130	£ 1,597,442	£ 798,868	£ 479,380	£ 357,831	£ 192,336	£ 5,115,096
Value of production ..	£ 885,146	£ 878,721	£ 346,256	£ 219,887	£ 168,805	£ 78,684	£ 2,577,499

(ii) *Total for Australia, 1937-38 to 1941-42.* The next table gives particulars for the last five years for Australia :—

**CEMENT AND CEMENT GOODS : AUSTRALIA.**

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories ..	125	132	132	146	134
Number of persons engaged ..	3,832	3,932	3,766	4,155	4,152
Value of land and buildings ..	£ 1,346,013	£ 1,350,175	£ 1,320,311	£ 1,319,560	£ 1,353,719
Value of plant and machinery ..	£ 2,308,148	£ 2,515,814	£ 2,387,391	£ 2,300,901	£ 2,381,841
Wages paid ..	£ 863,016	£ 897,426	£ 864,449	£ 1,008,113	£ 1,104,129
Value of fuel used ..	£ 573,427	£ 561,578	£ 573,443	£ 580,626	£ 627,614
Value of materials used ..	£ 1,429,104	£ 1,542,067	£ 1,486,396	£ 1,715,643	£ 1,910,883
Total value of output ..	£ 4,313,449	£ 4,488,891	£ 4,418,050	£ 4,803,432	£ 5,115,096
Value of production ..	£ 2,310,918	£ 2,385,246	£ 2,358,211	£ 2,507,163	£ 2,577,499
Cement, portland grey, produced ..	ton 851,914	867,849	864,917	860,002	889,834
	£ 2,991,927	£ 3,023,707	£ 2,931,394	£ 2,902,923	£ 2,953,591

3. **Chemicals, Drugs and Medicines.**—(i) *Details for each State, 1941-42.* This is an important industry in Class III. and details for each State during 1941-42 are shown in the following table :—

**CHEMICALS, DRUGS AND MEDICINES, 1941-42.**

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	162	71	12	15	13	5	278
Number of persons engaged ..	3,605	2,632	203	810	275	46	7,571
Value of land and buildings ..	£ 1,376,315	£ 749,283	£ 60,402	£ 453,310	£ 63,658	£ 37,315	£ 2,740,283
Value of plant and machinery ..	£ 858,458	£ 820,472	£ 29,400	£ 798,686	£ 178,788	£ 11,095	£ 2,696,899
Wages paid ..	£ 791,663	£ 637,731	£ 40,090	£ 207,527	£ 69,334	£ 6,059	£ 1,758,404
Value of fuel used ..	£ 107,033	£ 98,556	£ 5,376	£ 100,809	£ 10,441	£ 681	£ 329,496
Value of materials used ..	£ 3,238,718	£ 1,827,494	£ 146,042	£ 526,464	£ 126,610	£ 19,968	£ 5,885,296
Total value of output ..	£ 6,831,890	£ 3,709,051	£ 272,850	£ 1,161,464	£ 303,392	£ 39,802	£ 12,408,449
Value of production ..	£ 3,485,539	£ 1,873,001	£ 121,432	£ 534,191	£ 160,341	£ 19,153	£ 6,193,657

(ii) *Total for Australia, 1937-38 to 1941-42.* In the returns for Australia shown in the following table it will be seen that the industry has made consistent progress during each of the last five years :—

**CHEMICALS, DRUGS AND MEDICINES : AUSTRALIA.**

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories ..	228	238	243	259	278
Number of persons engaged ..	5,210	5,346	5,698	6,707	7,571
Value of land and buildings ..	£ 1,677,485	£ 1,817,727	£ 2,212,560	£ 2,473,391	£ 2,740,283
Value of plant and machinery ..	£ 1,119,602	£ 1,253,577	£ 1,888,531	£ 2,470,272	£ 2,696,899
Wages paid ..	£ 955,677	£ 1,011,906	£ 1,112,240	£ 1,408,919	£ 1,758,404
Value of fuel used ..	£ 119,880	£ 121,503	£ 148,753	£ 241,680	£ 329,496
Value of materials used ..	£ 3,219,896	£ 3,403,680	£ 3,922,543	£ 4,710,868	£ 5,885,296
Total value of output ..	£ 6,873,053	£ 7,351,745	£ 8,398,028	£ 10,026,247	£ 12,408,449
Value of production ..	£ 3,533,277	£ 3,826,562	£ 4,326,732	£ 5,073,699	£ 6,193,657



4. White Lead, Paints and Varnish.—(i) *Details for each State, 1941-42.* The following table shows particulars of this industry for each State during 1941-42 :—

### WHITE LEAD, PAINTS AND VARNISH FACTORIES, 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	49	41	4	10	2	2	108
Number of Persons engaged ..	1,774	405	40	151	10	3	2,383
Value of land and buildings ..	£ 587,821	134,511	6,798	69,164	(a)	(a)	680,2374
Value of plant and machinery ..	£ 255,099	52,433	3,424	42,726	(a)	(a)	635,5908
Wages paid ..	£ 501,221	102,590	9,589	34,204	(a)	(a)	665,0201
Value of fuel used ..	£ 45,763	7,725	1,008	2,446	(a)	(a)	557,119
Value of materials used ..	£ 2,415,412	414,803	44,367	162,171	(a)	(a)	63,061,915
Total value of output ..	£ 3,892,312	699,655	64,512	261,923	(a)	(a)	64,952,682
Value of production ..	£ 1,431,137	277,127	19,137	97,306	(a)	(a)	61,833,648

(a) Particulars not available for publication.

(b) Includes Western Australia and Tasmania.

(ii) *Total for Australia, 1937-38 to 1941-42.* The next table gives particulars for the last five years for Australia :—

### WHITE LEAD, PAINTS AND VARNISH FACTORIES : AUSTRALIA.

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories ..	98	102	105	109	108
Number of persons engaged ..	2,166	2,271	2,367	2,408	2,383
Value of land and buildings ..	£ 709,515	761,345	794,816	812,759	802,374
Value of plant and machinery ..	£ 306,759	324,222	316,874	358,447	355,908
Wages paid ..	£ 487,869	535,014	569,547	597,167	650,201
Value of fuel used ..	£ 44,513	44,992	49,472	53,940	57,119
Value of materials used ..	£ 2,391,785	2,275,027	2,718,543	2,864,935	3,061,915
Total value of output ..	£ 4,000,344	3,905,104	4,303,832	4,717,987	4,952,682
Value of production ..	£ 1,564,046	1,585,085	1,535,817	1,799,112	1,833,648

5. Soap and Candle Factories.—(i) *Details for each State, 1941-42.* The manufacture of these products is frequently carried on in the same factory, so that separate returns cannot be obtained. The following table gives particulars of soap and candle factories in each State for 1941-42 :—

### SOAP AND CANDLE FACTORIES, 1941-42.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories ..	35	13	10	6	2	2	68
Number of persons engaged ..	1,792	750	260	192	65	15	3,074
Value of land and buildings ..	£ 379,770	196,925	35,184	59,081	(a)	(a)	(b) 696,218
Value of plant and machinery ..	£ 241,596	183,833	21,793	36,009	(a)	(a)	(b) 498,970
Wages paid ..	£ 419,313	186,715	54,308	45,168	(a)	(a)	(b) 724,737
Value of fuel used ..	£ 48,410	63,015	5,907	4,074	(a)	(a)	(b) 124,615
Value of materials used ..	£ 1,457,562	792,038	154,931	112,940	(a)	(a)	(b) 62,602,943
Total value of output ..	£ 3,180,112	1,678,499	301,436	197,552	(a)	(a)	(b) 65,487,898
Value of production ..	£ 1,674,140	823,446	140,598	80,538	(a)	(a)	(b) 62,760,340

(a) Particulars not available for publication.

(b) Includes Western Australia and Tasmania.

(ii) *Total for Australia, 1937-38 to 1941-42.* The next table gives similar particulars for the last five years for Australia :—

### SOAP AND CANDLE FACTORIES : AUSTRALIA.

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories ..	65	65	68	66	68
Number of persons engaged ..	2,534	2,620	2,722	2,914	3,074
Value of land and buildings ..	£ 649,362	665,546	686,821	731,098	696,218
Value of plant and machinery ..	£ 556,427	576,732	582,786	490,993	498,970
Wages paid ..	£ 478,065	501,174	535,578	605,448	724,737
Value of fuel used ..	£ 72,670	76,283	87,094	96,283	124,615
Value of materials used ..	£ 1,787,068	1,567,999	1,792,039	1,973,953	2,602,943
Total value of output ..	£ 3,627,830	3,529,723	3,965,660	4,407,637	5,487,898
Value of Production ..	£ 1,768,092	1,885,441	2,086,527	2,337,401	2,760,340

(iii) *Raw Material Used and Production, 1937-38 to 1941-42.* The following statement shows the quantities of certain raw material used and the production in soap and candle factories in Australia for the last five years :—

**SOAP AND CANDLE FACTORIES : RAW MATERIAL USED AND PRODUCTION, AUSTRALIA.**

Particulars.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Tallow used .. .. cwt.	511,302	535,511	603,014	633,982	835,440
Alkali used .. ..	218,171	229,881	251,232	245,594	271,040
Coco-nut oil used, refined and unrefined .. ..	137,134	138,954	142,839	165,720	164,614
Soap made .. ..	952,507	986,087	1,051,618	1,037,844	1,254,950
Candles made .. ..	26,964	27,459	29,872	25,008	39,241

The output for the year 1941-42 comprised the following quantities of soap :— household, 843,543 cwt.; toilet, 258,772 cwt.; sand, 85,782 cwt.; soft, 20,820 cwt.; and woolscouring, 46,039 cwt. This excludes 5,333 cwt. of soap made in establishments not classified as Soap and Candle Factories.

6. *Chemical Fertilizers.*—(i) *Details for each State, 1941-42.* The following table gives particulars of the factories engaged in the manufacture of chemical fertilizers in each State during 1941-42. Details of the consumption, imports and exports of fertilizers will be found in Chapter XXII. "Agricultural Production".

**CHEMICAL FERTILIZERS, 1941-42.**

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	6	6	5	6	5	7	35
Number of persons engaged .. ..	211	942	94	545	320	24	2,136
Value of land and buildings £	116,054	545,029	70,509	203,340	498,391	44,098	1,538,321
Value of plant and machinery £	114,882	820,316	98,415	641,058	597,347	22,506	2,295,124
Wages paid .. ..	66,821	283,182	26,284	155,025	101,088	6,788	639,791
Value of fuel used .. ..	8,983	57,901	1,400	26,427	19,586	565	114,868
Value of materials used .. ..	529,784	1,360,768	312,184	694,752	833,958	89,821	3,821,267
Total value of output .. ..	704,529	1,927,262	406,373	926,810	1,101,976	92,626	5,219,576
Value of production .. ..	225,762	508,593	92,783	205,631	248,432	2,240	1,283,441

(ii) *Total for Australia, 1937-38 to 1941-42.* The development of this industry since 1937-38 is set out hereunder :—

**CHEMICAL FERTILIZERS : AUSTRALIA.**

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories .. ..	32	36	36	34	35
Number of persons engaged .. ..	2,474	2,540	2,392	2,312	2,136
Value of land and buildings .. ..	£ 1,424,055	1,449,157	1,529,219	1,513,639	1,538,321
Value of plant and machinery .. ..	£ 2,214,575	2,352,819	2,386,943	2,352,793	2,295,124
Wages paid .. ..	£ 599,947	601,477	604,233	615,085	639,791
Value of fuel used .. ..	£ 108,587	113,749	107,887	107,231	114,868
Value of materials used .. ..	£ 3,239,322	3,231,053	3,123,764	3,727,369	3,821,267
Total value of output .. ..	£ 4,904,383	4,944,800	4,652,284	5,327,996	5,219,576
Value of production .. ..	£ 1,556,474	1,599,998	1,420,633	1,493,393	1,283,441

7. *Smelting, Converting, Refining and Rolling of Iron and Steel.*—The extension of the classification referred to in § 1 par. 2 p. 647 has made possible the separate publication of details for the group of industries comprised herein. This grouping

includes ironworks, foundries, the making of iron safes and doors, steel castings, iron bedsteads, sash weights, steel window frames and sashes, nuts and bolts, springs, horse-shoes, screws, lifts, tools, brickmakers' implements and oxy-acetylene welding. Particulars for the year 1941-42 are as follows:—

### SMELTING, CONVERTING, REFINING AND ROLLING OF IRON AND STEEL, 1941-42.

Items.	N.S.W.	Victoria.	Q'land. (a)	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	182	164	..	40	I	..	387
Number of persons engaged ..	22,093	5,784	..	3,359	201	..	31,437
Value of land and buildings ..	£ 3,166,163	712,038	..	(b)	(b)	..	£ 4,595,620
Value of plant and machinery ..	£ 8,198,129	662,504	..	(b)	(b)	..	£ 10,556,961
Wages paid ..	£ 7,040,674	1,768,217	..	(b)	(b)	..	£ 9,749,026
Value of fuel used ..	£ 3,327,128	261,002	..	(b)	(b)	..	£ 3,744,235
Value of materials used ..	£ 29,340,452	2,039,245	..	(b)	(b)	..	£ 32,921,370
Total value of output ..	£ 45,001,066	5,006,076	..	(b)	(b)	..	£ 53,062,902
Value of production ..	£ 12,333,486	2,705,829	..	(b)	(b)	..	£ 16,397,297

(a) Now included with Engineering.

(b) Particulars not available for publication.

(c) Includes South Australia and Western Australia.

8. Engineering Works.—Formerly, it was impossible to show separate details for the engineering industry owing to the different classifications among the States, but since 1926-27 substantial uniformity has been attained.

The classification of establishments included in the Industrial Metal Group still presents some difficulty. This arises from the fact that some establishments are engaged in two or more distinct types of industrial activity. In such cases factory proprietors are asked to furnish separate returns for each activity, but this is not always practicable and consequently there is no alternative but to classify such factories according to their predominant activity. This difficulty is most acute in engineering works, but the following figures may be accepted as reasonably representative of the engineering industry, excluding the marine and electrical branches:—

### ENGINEERING WORKS,(a) 1941-42.

Items.	N.S.W.	Victoria.	Q'land. (b)	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	517	472	118	102	137	26	1,372
Number of persons engaged ..	18,829	18,283	3,722	4,277	2,330	377	47,818
Value of land and buildings ..	£ 2,570,940	2,423,312	392,929	271,728	375,685	50,194	£ 6,084,788
Value of plant and machinery ..	£ 2,154,979	2,331,633	326,019	356,295	288,272	35,365	£ 5,492,563
Wages paid ..	£ 5,794,993	5,698,221	953,755	1,022,637	680,682	93,296	£ 14,243,584
Value of fuel used ..	£ 219,038	243,489	57,235	55,536	43,708	5,308	£ 624,314
Value of materials used ..	£ 6,362,205	6,802,400	906,051	998,870	692,802	69,588	£ 15,831,976
Total value of output ..	£ 15,326,119	16,362,666	2,335,160	2,492,769	1,813,876	210,763	£ 38,541,353
Value of production ..	£ 8,744,816	9,316,777	1,371,874	1,438,363	1,077,366	135,867	£ 22,085,063

(a) Excludes marine and electrical.

(b) Includes smelting, converting, refining and rolling of iron and steel.

In addition to engineering works which supply ordinary requirements, many establishments manufacture special classes of machinery and implements. The manufacture of mining, smelting and textile machinery and apparatus forms an important section of this industry.



9. **Extracting and Refining of Non-ferrous Metals and Alloys.**—The following table gives particulars of metal extraction and ore reduction works, other than those connected with iron and steel. The returns do not include particulars of plants used in mines :—

### EXTRACTING AND REFINING OF NON-FERROUS METALS AND ALLOYS, 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.A. (a)	Tas.	Australia.
Number of factories ..	12	7	16	3	..	4	42
Number of persons engaged ..	1,603	96	1,108	1,326	..	2,431	6,564
Value of land and buildings £	319,804	32,713	326,532	121,289	..	559,662	1,357,000
Value of plant and machinery ..	£ 1,248,120	13,170	908,832	656,610	..	1,226,630	4,053,362
Wages paid ..	£ 544,971	30,379	327,089	494,280	..	710,950	2,107,609
Value of fuel used ..	£ 285,100	5,649	107,668	107,208	..	269,164	774,789
Value of materials used ..	£ 11,153,471	409,012	1,774,241	5,431,915	..	1,710,946	20,479,585
Total value of output ..	£ 13,681,551	485,746	2,636,047	6,229,075	..	3,468,737	26,501,156
Value of production ..	£ 2,242,980	71,085	754,138	689,952	..	1,488,627	5,240,782

(a) In Western Australia the majority of the plants are worked on the mines, and are therefore not included.

10. **Electrical Installations, Cables and Apparatus.**—(i) *Details for each State, 1941-42.* The following table shows particulars of this industry for each State during 1941-42 :—

### ELECTRICAL INSTALLATIONS, CABLES AND APPARATUS, 1941-42.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	177	123	16	27	28	12	383
Number of persons engaged ..	9,662	4,264	194	899	201	83	15,303
Value of land and buildings £	1,283,116	611,562	35,289	80,045	62,738	17,564	2,090,314
Value of plant and machinery £	881,906	323,733	7,280	44,615	10,232	10,595	1,278,361
Wages paid ..	£ 2,483,080	1,044,137	37,508	211,700	39,296	11,347	3,827,158
Value of fuel used ..	£ 103,761	34,750	848	10,008	1,711	560	151,698
Value of materials used ..	£ 3,381,082	1,661,304	37,255	244,457	50,235	19,905	5,394,238
Total value of output ..	£ 7,314,524	3,351,092	95,255	574,231	125,742	46,817	11,507,661
Value of production ..	£ 3,829,681	1,655,038	57,152	319,706	73,796	26,352	5,961,725

(ii) *Total for Australia, 1937-38 to 1941-42.*—The increased output of electrical energy in Australia within recent years, referred to in par. 39 below, caused a corresponding demand for electrical equipment. As imports declined heavily during the depression years the local industry was called upon to furnish the bulk of the new needs, and consequently a remarkable development in the manufacture of electrical goods in Australia has resulted.

### ELECTRICAL INSTALLATIONS, CABLES AND APPARATUS : AUSTRALIA.

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories ..	..	354	360	362	383
Number of persons engaged ..	..	11,054	10,666	11,461	13,218
Value of land and buildings ..	£ 1,570,455	1,627,183	1,696,733	1,831,807	2,090,314
Value of plant and machinery ..	£ 799,283	896,553	940,696	1,003,036	1,278,361
Wages paid ..	£ 1,915,348	2,031,098	2,273,178	2,827,843	3,827,158
Value of fuel used ..	£ 101,926	104,594	110,825	122,795	151,698
Value of materials used ..	£ 3,101,308	3,195,032	3,422,601	4,310,587	5,394,238
Total value of output ..	£ 6,494,421	6,954,498	7,455,610	8,972,810	11,507,661
Value of production ..	£ 3,291,187	3,654,872	3,922,184	4,539,428	5,961,725

11. **Railway and Tramway Workshops.**—(i) *Details for each State, 1941-42.* The railway and tramway workshops which form an important item in Class IV. are chiefly State-owned institutions and their development is reflected by the growth of the railway

and tramway systems of Australia. The following table includes, in addition, municipal establishments for manufacturing and repairing rolling stock. Private institutions numbering 9 in 1941-42 have been excluded :—

### TRAMCARS, RAILWAY ROLLING STOCK AND CARRIAGES, ETC.(a), 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	36	24	11	15	21	7	114
Number of persons engaged ..	12,694	8,149	4,688	6,422	2,369	698	35,020
Value of land and buildings £	3,067,959	1,498,884	544,478	967,353	509,014	94,803	6,682,491
Value of plant and machinery ..	£ 2,630,321	£ 1,117,748	437,018	859,519	424,043	51,020	5,519,669
Wages paid ..	£ 4,051,517	£ 2,401,128	1,529,733	2,036,671	700,950	213,485	10,936,517
Value of fuel used ..	£ 127,721	£ 67,835	43,360	84,857	31,214	9,464	367,451
Value of materials used ..	£ 2,625,750	£ 1,460,077	821,858	1,385,455	454,019	27,616	6,774,775
Total value of output ..	£ 7,485,701	£ 4,326,062	2,649,341	3,857,686	1,490,783	276,497	20,086,070
Value of production ..	£ 4,732,230	£ 2,798,150	£ 1,784,123	2,387,374	£ 1,002,550	239,417	£ 12,943,844

(a) Government and Municipal only.

A railway workshop in the Northern Territory is chiefly engaged in making repairs to rolling stock, etc., no new goods being manufactured. Particulars in regard to this establishment are not included in any of the tables in this chapter.

(ii) *Total for Australia, 1937-38 to 1941-42.* The following table shows the development of railway and tramway workshops in Australia since 1937-38 :—

### TRAMCARS, RAILWAY ROLLING STOCK AND CARRIAGES, ETC. (a) : AUSTRALIA.

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories ..	116	117	115	115	114
Number of persons engaged ..	27,207	27,310	27,020	30,178	35,020
Value of land and buildings ..	£ 6,552,522	£ 6,736,924	£ 6,593,991	£ 6,619,976	£ 6,682,491
Value of plant and machinery ..	£ 5,109,599	£ 5,390,179	£ 5,382,465	£ 5,476,446	£ 5,519,669
Wages paid ..	£ 6,525,372	£ 6,720,990	£ 6,744,603	£ 8,014,441	£ 10,936,517
Value of fuel used ..	£ 226,493	£ 226,108	£ 235,637	£ 281,726	£ 367,451
Value of materials used ..	£ 5,032,992	£ 4,976,353	£ 4,915,591	£ 5,116,944	£ 6,774,775
Total value of output ..	£ 13,029,225	£ 13,223,114	£ 13,227,518	£ 14,867,940	£ 20,086,070
Value of production ..	£ 7,769,740	£ 8,020,653	£ 8,076,290	£ 9,469,270	£ 12,943,844

(a) Government and Municipal only.

12. *Motor Vehicles and Cycles.*—The industries catering for the motor trade are included in Class IV. “Industrial Metals, Machines, Implements and Conveyances”. Returns in regard to assembling and repairing are shown hereunder for 1941-42 :—

### ASSEMBLING AND REPAIRING OF MOTOR VEHICLES AND CYCLES, 1941-42.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	1,147	833	302	181	252	118	2,833
Number of persons engaged ..	7,043	6,696	1,903	1,583	1,169	597	18,991
Value of land and buildings ..	£ 2,822,491	£ 1,806,342	£ 528,667	£ 477,859	£ 504,074	£ 233,296	£ 6,372,729
Value of plant and machinery ..	£ 619,198	£ 429,930	£ 131,928	£ 146,268	£ 107,412	£ 51,671	£ 1,486,407
Wages paid ..	£ 1,540,815	£ 1,684,495	£ 381,359	£ 352,201	£ 253,293	£ 96,225	£ 4,308,388
Value of fuel used ..	£ 74,850	£ 71,745	£ 19,471	£ 14,851	£ 15,059	£ 4,120	£ 200,090
Value of materials used ..	£ 2,492,025	£ 2,048,402	£ 382,930	£ 405,410	£ 359,758	£ 101,049	£ 5,789,574
Total value of output ..	£ 5,009,417	£ 4,804,313	£ 1,041,445	£ 903,299	£ 807,006	£ 267,020	£ 12,892,500
Value of production ..	£ 2,442,542	£ 2,684,166	£ 639,044	£ 543,038	£ 432,189	£ 161,851	£ 6,902,830

Particulars in regard to motor body building for 1941-42 are as follows:—

### MOTOR BODY BUILDING, 1941-42.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas. (11)	Australia.
Number of factories ..	48	70	32	14	11	19	194
Number of persons engaged ..	1,006	3,059	429	9,163	160	129	13,955
Value of land and buildings ..	£ 245,382	£ 556,828	£ 67,931	£ 410,740	£ 49,959	£ 49,800	£ 1,380,246
Value of plant and machinery ..	£ 53,373	£ 209,437	£ 30,461	£ 277,595	£ 12,354	£ 3,347	£ 580,567
Wages paid ..	£ 256,821	£ 922,302	£ 90,200	£ 2,731,175	£ 35,486	£ 23,080	£ 4,055,124
Value of fuel used ..	£ 7,500	£ 23,744	£ 3,412	£ 86,286	£ 1,900	£ 465	£ 123,442
Value of materials used ..	£ 429,477	£ 1,666,957	£ 110,667	£ 1,898,204	£ 63,354	£ 18,953	£ 4,138,612
Total value of output ..	£ 926,368	£ 3,192,780	£ 253,118	£ 5,303,644	£ 127,599	£ 56,381	£ 9,855,790
Value of production ..	£ 491,325	£ 1,470,079	£ 130,039	£ 3,409,151	£ 56,270	£ 39,803	£ 5,593,736

(a) Includes horse-drawn vehicles.

The output of motor bodies together with the number imported into Australia for 1931-32 and the last five years are shown in the next table:—

### MOTOR BODIES : PRODUCTION AND IMPORTS, AUSTRALIA.

Items.	1931-32.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Motor Bodies—						
Number made ..	No. 6,323	92,245	79,436	71,487	49,130	62,731
Value ..	£ 450,510	£ 7,411,177	£ 6,421,142	£ 5,583,316	£ 3,337,346	£ 4,321,988
Number imported ..	No. 61	646	532	345	50	16
Value ..	£ 7,360	£ 63,810	£ 56,641	£ 27,315	£ 4,057	£ 1,805

13. **Agricultural Implement Works.**—(i) *General.* The manufacture of agricultural implements is of particular interest, owing to the extensive agricultural activities and to the fact that it was one of the first to which it was sought to apply the so-called "New Protection". The articles manufactured include a wide range of agricultural implements for tillage, seeding and planting and the harvesting of crops. Other farm machinery made includes oil engines, windmills, chaff-cutters and machinery used in the dairying industry.

(ii) *Details for States, 1941-42.* The following table gives details respecting agricultural implement works in each State for 1941-42:—

### AGRICULTURAL IMPLEMENT WORKS, 1941-42.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	37	74	9	33	8	..	161
Number of persons engaged ..	1,613	4,674	1,266	1,250	101	..	8,934
Value of land and buildings ..	£ 178,525	£ 609,777	£ 45,527	£ 148,455	£ 43,682	..	£ 1,025,966
Value of plant and machinery ..	£ 103,523	£ 604,379	£ 100,448	£ 179,415	£ 2,810	..	£ 990,611
Wages paid ..	£ 484,300	£ 1,466,355	£ 312,400	£ 294,004	£ 32,079	..	£ 2,580,138
Value of fuel used ..	£ 17,222	£ 130,203	£ 18,712	£ 27,512	£ 620	..	£ 194,278
Value of materials used ..	£ 493,290	£ 1,707,299	£ 301,251	£ 360,687	£ 12,718	..	£ 2,976,645
Total value of output ..	£ 1,144,563	£ 3,713,633	£ 704,439	£ 745,995	£ 58,047	..	£ 6,425,617
Value of production ..	£ 633,991	£ 1,876,131	£ 350,470	£ 349,390	£ 41,700	..	£ 3,254,694

(iii) *Total for Australia, 1937-38 to 1941-42.* With the improvement in prices of agricultural products in the year 1937-38 the industry expanded, but the decline in the two following years combined with war conditions reflected the fall in world prices



of farm products. But with the increased food requirements of the fighting forces at home and abroad the industry expanded considerably, particularly in the year 1941-42. Details for each of the last five years are as follows :—

### AGRICULTURAL IMPLEMENT WORKS : AUSTRALIA.

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories .. ..	160	161	168	161	161
Number of persons engaged .. ..	7,756	6,563	6,379	7,320	8,934
Value of land and buildings .. ..	£ 804,116	996,949	1,034,172	1,042,277	1,025,966
Value of plant and machinery .. ..	£ 729,771	910,520	920,700	981,957	990,611
Wages paid .. ..	£ 1,629,771	1,373,213	1,393,405	1,778,465	2,589,138
Value of fuel used .. ..	£ 105,175	81,736	91,486	133,060	194,278
Value of materials used .. ..	£ 1,904,156	1,485,018	1,522,735	1,809,800	2,976,645
Total value of output .. ..	£ 4,225,658	3,403,091	3,419,701	4,300,340	6,425,617
Value of production .. ..	£ 2,216,327	1,836,337	1,805,480	2,357,480	3,254,694

14. *Wireless Apparatus.*—The introduction of wireless broadcasting in 1923 gave rise to a new industry in Australia. Early statistical details of the industry are not available as they were grouped together with other electrical apparatus. In 1930-31, a new classification of factories was adopted and “Wireless Apparatus” was shown as a separate industry. The industry is confined, almost entirely, to New South Wales and Victoria. The number of broadcast listeners’ licences has increased from 331,128 in 1930-31 to 1,320,073 in 1941-42, and this increase is reflected in the advancement of the industry during that period. Since 1939-40 considerable expansion has taken place in the industry to meet the requirements of the fighting services.

### WIRELESS APPARATUS : AUSTRALIA.

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories .. ..	73	72	73	77	74
Number of persons engaged .. ..	5,519	4,828	4,869	6,165	8,429
Value of land and buildings .. ..	£ 549,254	557,953	598,092	573,171	661,706
Value of plant and machinery .. ..	£ 315,325	305,468	352,103	335,735	415,736
Wages paid .. ..	£ 791,907	754,302	785,388	1,121,252	1,977,294
Value of fuel used .. ..	£ 24,022	23,525	26,274	33,473	44,623
Value of materials used .. ..	£ 1,940,286	1,355,683	1,546,895	1,907,840	2,680,753
Total value of output .. ..	£ 3,247,472	2,502,338	2,834,628	3,566,280	5,323,681
Value of production .. ..	£ 1,274,164	1,123,130	1,261,459	1,624,967	2,598,305

The number of domestic receiving sets assembled in 1941-42 was 105,833, and the number of domestic chassis made was 97,927.

15. *Cotton.*—(i) *General.* Cotton has been grown in Australia since 1860, but never on a very large scale. The quantity of unginned cotton produced during the decennium ended 1938 varied between 6 million lb. in 1932 and 27 million lb. in 1934, and averaged 16 million lb. per annum. Arising out of the development in the local manufacture of cotton materials and the further expansion consequent upon the war in 1939, plans have been completed for an extension of the area devoted to the cultivation of this crop. The growing of cotton is restricted to Queensland and is referred to in some detail in Chapter XXII. “Agricultural Production”.

(ii) *Ginning.* The ginning and marketing of cotton is controlled by the Queensland Cotton Board. The Board operates ginneries and processes by-products. The production of raw cotton is insufficient for local factory requirements and this is supplemented by imports from overseas, chiefly from India and the United States of America.

(iii) *Spinning and Weaving.* The recent expansion in the spinning and weaving section of the cotton industry marks an important event in its development. New factories have been or are being established in addition to those already operating. When these are in full production, Australia will be producing an extensive range of cotton goods, including duck and canvas from cotton or flax, denims, drill, etc., tyre cord and tyre cord fabric. The number of establishments treating cotton in Australia during 1941-42 was 67, the number of persons engaged 7,309, and the value of the output £6,668,051.

16. *Woollen and Tweed Mills.*—(i) *Details for each State, 1941-42.* The manufacture of woollens and tweeds was established at an early period in Australian history and was under Government control, the first record in New South Wales dating back to 1801, when a few blankets were made by convicts, while manufacture in Victoria dates from 1867. The following table gives particulars for 1941-42 :—

#### WOOLLEN AND TWEED (INCLUDING WOOLSCOURING) MILLS, 1941-42.

Items.	N.S.W. (a)	Victoria.	Q'land. (a)	S. Aust. (b)	W.A. (a)	Tas.	Australia.
Number of factories ..	32	62	3	9	1	4	111
Number of persons engaged ..	9,364	12,060	861	1,514	163	2,400	26,362
Value of land and buildings ..	£ 855,025	£ 1,406,310	(c)	£ 143,764	(c)	£ 232,752	£ 2,791,914
Value of plant and machinery ..	£ 1,129,077	£ 1,506,452	(c)	£ 225,861	(c)	£ 190,391	£ 3,270,601
Wages paid ..	£ 1,729,310	£ 2,733,220	(c)	£ 368,974	(c)	£ 430,902	£ 5,416,150
Value of fuel used ..	£ 159,908	£ 332,302	(c)	£ 58,419	(c)	£ 33,227	£ 604,515
Value of materials used ..	£ 5,027,736	£ 7,501,148	(c)	£ 1,267,043	(c)	£ 1,271,940	£ 15,408,207
Total value of output ..	£ 8,048,015	£ 12,683,553	(c)	£ 1,830,060	(c)	£ 2,242,108	£ 25,407,073
Value of production ..	£ 2,860,371	£ 4,850,103	(c)	£ 504,598	(c)	£ 936,941	£ 9,454,351

(a) Excludes Wool-scouring. (b) Includes Fellmongery. (c) Particulars not available for publication. (d) Includes Queensland and Western Australia.

(ii) *Total for Australia, 1937-38 to 1941-42.* The extent of the woollen and tweed milling industry in Australia in the last five years is shown in the following table :—

#### WOOLLEN AND TWEED MILLS (INCLUDING WOOLSCOURING) : AUSTRALIA.(a)

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories ..	87	90	96	102	111
Number of persons engaged ..	19,103	19,608	22,041	25,031	26,362
Value of land and buildings ..	£ 2,435,114	£ 2,380,009	£ 2,484,781	£ 2,606,603	£ 2,791,914
Value of plant and machinery ..	£ 3,416,233	£ 3,369,517	£ 3,460,522	£ 3,381,505	£ 3,270,601
Wages paid ..	£ 2,741,729	£ 2,887,907	£ 3,412,709	£ 4,402,091	£ 5,416,150
Value of fuel used ..	£ 379,380	£ 392,537	£ 466,247	£ 537,491	£ 604,515
Value of materials used ..	£ 8,046,352	£ 7,331,117	£ 9,039,281	£ 11,771,911	£ 15,408,207
Total value of output ..	£ 12,618,132	£ 12,514,610	£ 15,766,930	£ 21,060,244	£ 25,467,073
Value of production ..	£ 4,192,400	£ 4,790,956	£ 6,261,402	£ 8,750,842	£ 9,454,351

(a) Excludes Wool-scouring in New South Wales, Queensland and Western Australia but includes Fellmongery in South Australia.

(iii) *Quantity and Value of Production.* The production consists chiefly of tweed cloths, flannels, rugs, blankets and yarn, all of which have acquired a reputation for purity and durability. Detailed particulars for the several States are not available for publication. The total quantity of tweed and cloth manufactured in Australia in 1941-42 was 35,586,619 square yards in woollen mills and 1,362,565 square yards in other works. In New South Wales 16,509,982 square yards and in Victoria 17,761,682 square yards of tweed and cloth were manufactured in woollen mills. The production of flannel amounted to 5,981,126 square yards, while blankets, shawls and rugs to the number of 3,753,392 were made.

17. *Hosiery and Other Knitted Goods.*—(i) *Details for each State, 1941-42.* In addition to the woollen and tweed factories, there were 328 hosiery and knitting mills operating in Australia during 1941-42. The total number of persons engaged in these establishments was 17,711 of whom 13,380 were females. Details for each State are shown in the following table :—

#### HOSIERY AND OTHER KNITTED GOODS, 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	82	231	1	7	4	3	328
Number of persons engaged ..	5,145	12,082	171	89	140	84	17,711
Value of land and buildings £	691,974	1,334,321	(a)	(a)	12,447	7,083	b 2,066,723
Value of plant and machinery £	502,738	1,043,866	(a)	(a)	7,070	8,112	b 1,576,301
Wages paid ..	893,557	2,098,427	(a)	(a)	15,280	10,563	b 3,049,560
Value of fuel used ..	£ 37,381	111,102	(a)	(a)	1,217	880	b 151,716
Value of materials used ..	£ 2,097,254	4,952,422	(a)	(a)	69,628	69,219	b 7,921,884
Total value of output ..	£ 4,472,703	8,975,065	(a)	(a)	105,092	90,625	b 13,838,471
Value of production ..	£ 1,738,008	3,911,541	(a)	(a)	34,247	20,517	b 5,764,871

(a) Particulars not available for publication.

(b) Includes Queensland and South Australia.

(ii) *Total for Australia, 1937-38 to 1941-42.* Comparative statistics for the five years are shown in the following table :—

#### HOSIERY AND OTHER KNITTED GOODS : AUSTRALIA.

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories ..	306	313	323	328	328
Number of persons engaged ..	18,230	18,159	19,073	19,408	17,711
Value of land and buildings ..	£ 1,861,884	1,962,336	1,980,550	2,007,062	2,066,723
Value of plant and machinery ..	£ 1,926,882	1,930,564	1,800,451	1,629,917	1,576,301
Wages paid ..	£ 2,319,355	2,331,536	2,620,190	2,889,267	3,049,560
Value of fuel used ..	£ 126,949	133,154	149,706	151,146	151,716
Value of materials used ..	£ 4,508,691	4,284,216	5,499,891	6,986,405	7,921,884
Total value of output ..	£ 8,534,886	8,226,468	10,161,729	12,188,378	13,838,471
Value of production ..	£ 3,899,246	3,809,098	4,512,132	5,050,827	5,764,871

(iii) *Raw Material used and Production, 1941-42.* The main raw materials consumed in establishments manufacturing hosiery and other knitted goods during 1941-42 consisted of woollen yarn, 13,530,897 lb.; cotton yarn, 8,324,027 lb.; silk yarn, 330,808 lb.; and artificial silk yarn, 5,970,060 lb. Production comprised 42,540,504 garments, valued at £7,587,914; 1,857,504 dozen pairs of stockings, valued at £2,910,880; and 2,151,694 dozen pairs of socks, valued at £2,058,005.

18. *Tanning, Currying and Leather Dressing.*—(i) *Details for each State, 1941-42.* In Class VII. the most important industry is tanning. Formerly the production of tanneries in Australia was confined to the coarser sorts of leathers, but there are now very few kinds which cannot be produced locally, and an export trade has been built up in some varieties.

#### TANNING, CURRYING AND LEATHER DRESSING, 1941-42.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	Aust.
Number of factories ..	68	41	14	9	5	2	139
Number of persons engaged ..	1,967	2,149	459	111	141	17	4,844
Value of land and buildings ..	£ 372,936	422,302	35,523	(a)	38,239	(a)	b 894,260
Value of plant and machinery ..	£ 235,504	228,515	44,679	(a)	26,688	(a)	b 548,288
Wages paid ..	£ 537,636	623,540	118,421	(a)	38,234	(a)	b 1,347,934
Value of fuel used ..	£ 42,548	60,941	8,271	(a)	2,895	(a)	b 116,914
Value of materials used ..	£ 2,187,252	1,986,465	529,427	(a)	155,488	(a)	b 4,969,830
Total value of output ..	£ 3,152,318	3,080,318	743,514	(a)	201,505	(a)	b 7,405,034
Value of production ..	£ 922,518	1,032,912	205,816	(a)	103,182	(a)	b 2,318,890

(a) Particulars not available for publication.

(b) Includes South Australia and Tasmania.



(ii) *Total for Australia, 1937-38 to 1941-42.* The development of the tanning industry during the years stated is shown in the following table :—

### TANNING, CURRYING AND LEATHER DRESSING : AUSTRALIA.

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories .. ..	131	132	132	137	139
Number of persons engaged ..	4,400	4,375	4,566	4,473	4,844
Value of land and buildings ..	£ 812,051	813,713	839,251	865,759	894,260
Value of plant and machinery ..	£ 524,125	523,538	538,801	544,890	548,288
Wages paid .. ..	£ 911,835	919,781	973,640	1,030,495	1,347,934
Value of fuel used .. ..	£ 89,699	87,670	96,219	100,944	116,914
Value of materials used .. ..	£ 3,502,252	2,983,041	3,909,992	4,043,285	4,969,830
Total value of output .. ..	£ 5,064,188	4,592,642	5,788,732	5,942,320	7,405,634
Value of production .. ..	£ 1,472,237	1,521,931	1,782,521	1,798,091	2,318,890

(iii) *Raw Material Used and Production, 1941-42.* The quantities of raw material used and leather produced in tanneries in each State are shown in the following table. Some leather is also produced in works other than tanneries, but this is excluded :—

### TANNERIES : RAW MATERIAL USED AND PRODUCTION, 1941-42.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia. (b)
Hides .. .. No.	874,330	933,763	294,755	(a)	89,600	(a)	2,261,355
Skins—							
Calf .. ..	631,835	572,657	152,914	1,774	355	..	1,359,535
Goat .. ..	780,014	128,729	(a)	(a)	..	..	910,976
Sheep .. ..	1,493,803	333,017	..	(a)	..	(a)	1,847,297
Marsupial .. ..	8,496	141,951	32,931	1,631	169	..	185,178
Felts treated .. ..	2,049,564	(a)	(a)	..	..	..	2,626,488
Bark used—							
Wattle .. .. tons	9,220	6,891	2,274	1,000	(a)	(a)	19,622
Other .. ..	293	1,745	(a)	(a)	526	(a)	2,571
Tanning extract used .. lb.	8,591,144	5,890,705	3,100,216	(a)	1,867,232	(a)	19,562,621
Leather made—							
Sole and Belting ..	14,314,204	15,043,710	5,202,076	(a)	2,776,884	(a)	38,247,098
Harness .. ..	425,189	614,604	611,335	65,854	55,510	..	1,772,522
Upholstery .. .. sq. ft.	(a)	(a)	..	(a)	..	..	6,531,840
Dressed and Upper from Hides—							
Sold by Measure-ment—							
Patent sq. ft.	(a)	(a)	..	..	..	..	2,121,093
All Other .. ..	11,275,304	15,776,866	4,500,385	1,335,919	(a)	(a)	33,736,667
Sold by Weight—							
Waxed Kip .. lb.	(a)	18,694	(a)	19,319	4,837	(a)	101,137
All Other .. ..	937,866	478,808	(a)	90,229	22,440	(a)	1,556,027
Dressed from skins—							
Calf .. .. sq. ft.	4,753,241	4,309,003	1,385,997	(a)	(a)	..	10,450,672
Goat .. ..	3,616,426	(a)	(a)	..	..	..	4,184,778
Sheep .. ..	10,602,537	2,015,410	(a)	(a)	..	..	13,297,947
Marsupial .. ..	21,925	349,796	200,574	(a)	3,375	(a)	576,810

(a) Not available for publication.

(b) Includes particulars for States marked (a).

19. *Tailoring and Ready-made Factories.*—(i) *Details for each State, 1941-42.* The importance of this industry in each State is shown in the following table :—

### TAILORING AND READY-MADE FACTORIES, 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	486	357	109	108	69	20	1,149
Number of persons engaged ..	13,334	8,687	2,984	2,108	883	382	28,378
Value of land and buildings ..	£ 1,717,816	967,990	210,733	211,613	137,802	58,174	3,361,158
Value of plant and machinery ..	£ 219,042	176,009	33,910	21,159	12,637	5,896	408,553
Wages paid .. ..	£ 2,031,748	1,442,003	377,853	296,963	123,541	53,100	4,325,358
Value of fuel used .. ..	£ 37,163	33,388	7,513	6,148	2,511	751	87,804
Value of materials used .. ..	£ 4,014,754	3,497,142	801,668	269,110	175,026	46,580	8,804,550
Total value of output .. ..	£ 7,149,052	5,855,008	1,122,788	719,281	371,006	130,261	13,049,096
Value of production .. ..	£ 3,097,735	2,325,078	613,607	113,923	193,439	82,960	6,756,742

(ii) *Total for Australia, 1937-38 to 1941-42.* Details for the last five years are as follows :—

### TAILORING AND READY-MADE FACTORIES : AUSTRALIA.

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories .. ..	1,172	1,177	1,162	1,154	1,149
Number of persons engaged .. ..	26,765	26,499	27,391	28,205	28,378
Value of land and buildings .. ..	£ 3,100,309	3,175,748	3,201,962	3,264,561	3,364,458
Value of plant and machinery .. ..	£ 332,814	355,503	396,819	420,907	468,653
Wages paid .. ..	£ 3,094,693	3,168,472	3,385,866	3,736,938	4,325,388
Value of fuel used .. ..	£ 66,834	72,431	72,717	81,121	87,804
Value of materials used .. ..	£ 5,123,268	4,946,519	5,626,338	6,834,626	8,804,550
Total value of output .. ..	£ 9,801,313	9,830,646	10,703,233	12,470,248	15,649,096
Value of production .. ..	£ 4,611,211	4,811,696	5,009,178	5,554,501	6,756,742

20. Dressmaking and Millinery Establishments.—(i) *Details for each State, 1941-42.* Particulars of dressmaking and millinery establishments are given separately in the following tables :—

### DRESSMAKING ESTABLISHMENTS, 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories .. ..	117	435	40	56	37	9	694
Number of persons engaged .. ..	1,535	8,215	919	818	666	74	12,227
Value of land and buildings .. ..	£ 200,597	1,207,703	75,481	71,419	74,957	7,200	1,637,357
Value of plant and machinery .. ..	£ 14,348	114,431	13,120	11,502	8,052	2,233	163,686
Wages paid .. ..	£ 174,470	1,114,935	91,285	82,876	64,079	4,750	1,532,395
Value of fuel used .. ..	£ 2,104	19,548	1,711	1,845	1,118	147	26,473
Value of materials used .. ..	£ 145,661	2,477,748	118,931	81,297	96,894	2,959	2,923,490
Total value of output .. ..	£ 392,349	4,465,372	262,942	223,640	211,641	11,538	5,567,482
Value of production .. ..	£ 244,584	1,968,076	142,300	140,498	113,629	8,432	2,617,519

(a) Includes Millinery.

### MILLINERY ESTABLISHMENTS, 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories .. ..	54	57	15	12	5	..	143
Number of persons engaged .. ..	1,296	1,060	416	226	39	..	3,037
Value of land and buildings .. ..	£ 228,261	133,469	35,480	24,915	3,080	..	425,205
Value of plant and machinery .. ..	£ 14,122	14,901	6,298	1,728	212	..	37,261
Wages paid .. ..	£ 172,856	146,870	47,291	23,127	4,029	..	394,173
Value of fuel used .. ..	£ 5,221	3,666	974	934	73	..	10,868
Value of materials used .. ..	£ 262,648	210,416	69,203	38,402	6,611	..	587,280
Total value of output .. ..	£ 584,739	486,729	143,180	78,654	12,078	..	1,305,380
Value of production .. ..	£ 316,870	272,647	73,003	39,318	5,394	..	707,232

(a) Included in Dressmaking.

(ii) *Total for Australia, 1937-38 to 1941-42.* Particulars of dressmaking and millinery establishments in Australia for the last five years are shown in the following table :—

### DRESSMAKING AND MILLINERY ESTABLISHMENTS : AUSTRALIA.

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories .. ..	871	869	840	848	837
Number of persons engaged .. ..	16,426	16,398	15,950	16,087	15,264
Value of land and buildings .. ..	£ 2,023,371	2,051,611	2,043,726	2,125,668	2,062,562
Value of plant and machinery .. ..	£ 194,553	189,263	188,690	197,830	200,947
Wages paid .. ..	£ 1,588,231	1,652,808	1,649,077	1,817,518	1,926,568
Value of fuel used .. ..	£ 32,157	33,067	33,412	35,974	37,341
Value of materials used .. ..	£ 2,801,184	2,609,363	2,672,435	3,205,274	3,510,770
Total value of output .. ..	£ 5,302,983	5,234,727	5,271,713	6,149,563	6,872,862
Value of production .. ..	£ 2,469,642	2,592,297	2,565,866	2,908,315	3,324,751

21. Shirts, Collars and Underclothing.—(i) *Details for each State, 1941-42.* Particulars of this industry are shown in the following table :—

## SHIRTS, COLLARS AND UNDERCLOTHING, 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	136	92	17	30	13	..	288
Number of persons engaged ..	4,789	3,684	1,028	623	616	..	10,740
Value of land and buildings ..	£ 480,273	£ 404,963	£ 55,180	£ 34,339	£ 34,953	..	£ 1,009,714
Value of plant and machinery ..	£ 99,542	£ 102,463	£ 15,356	£ 14,066	£ 13,303	..	£ 244,730
Wages paid ..	£ 643,384	£ 527,749	£ 120,097	£ 73,370	£ 68,392	..	£ 1,432,992
Value of fuel used ..	£ 10,844	£ 11,139	£ 1,965	£ 1,694	£ 984	..	£ 26,626
Value of materials used ..	£ 2,190,803	£ 1,597,851	£ 222,066	£ 75,015	£ 117,898	..	£ 4,205,433
Total value of output ..	£ 3,301,019	£ 2,533,147	£ 403,043	£ 170,251	£ 209,541	..	£ 6,623,001
Value of production ..	£ 1,099,372	£ 924,157	£ 178,112	£ 98,642	£ 90,659	..	£ 2,390,942

(ii) *Total for Australia, 1937-38 to 1941-42.* The following table shows the progress of the industry since 1937-38 :—

## SHIRTS, COLLARS AND UNDERCLOTHING : AUSTRALIA.

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories ..	289	283	279	282	288
Number of persons engaged ..	11,134	11,081	11,444	11,078	10,740
Value of land and buildings ..	£ 910,595	£ 945,972	£ 929,306	£ 962,681	£ 1,009,714
Value of plant and machinery ..	£ 229,797	£ 230,579	£ 231,109	£ 244,640	£ 244,730
Wages paid ..	£ 1,096,013	£ 1,142,855	£ 1,216,483	£ 1,264,067	£ 1,432,992
Value of fuel used ..	£ 23,845	£ 23,639	£ 25,599	£ 25,611	£ 26,626
Value of materials used ..	£ 2,788,667	£ 2,650,779	£ 3,032,969	£ 3,497,898	£ 4,205,433
Total value of output ..	£ 4,522,879	£ 4,435,209	£ 4,979,988	£ 5,559,702	£ 6,623,001
Value of production ..	£ 1,710,367	£ 1,760,791	£ 1,921,420	£ 2,036,193	£ 2,390,942

22. Boot Factories.—(i) *Boot and Shoe Factories, 1941-42.* The boot and shoe industry holds an important place both in regard to employment afforded and extent of output. The operations of these factories have been rather obscured in recent years by the inclusion of a large number of repair establishments in the returns, but this difficulty has been overcome by the collection of separate statistics for each industry, and in the following table the details relate to boot and shoe factories as distinct from those devoted to repairing and bespoke work :—

## BOOT AND SHOE FACTORIES, 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	105	164	21	15	10	3	318
Number of persons engaged ..	6,244	9,814	958	984	453	75	18,528
Value of land and buildings ..	£ 528,457	£ 649,575	£ 34,824	£ 58,807	£ 47,541	£ 5,020	£ 1,324,224
Value of plant and machinery ..	£ 276,634	£ 438,753	£ 68,560	£ 97,376	£ 51,646	£ 1,959	£ 934,928
Wages paid ..	£ 1,281,105	£ 2,123,570	£ 183,210	£ 181,485	£ 89,698	£ 15,212	£ 3,874,280
Value of fuel used ..	£ 19,419	£ 38,382	£ 2,541	£ 3,462	£ 2,204	£ 239	£ 66,247
Value of materials used ..	£ 2,510,712	£ 4,264,292	£ 392,520	£ 455,302	£ 258,860	£ 34,771	£ 7,916,457
Total value of output ..	£ 4,353,381	£ 7,672,775	£ 650,141	£ 737,102	£ 374,008	£ 54,079	£ 13,842,386
Value of production ..	£ 1,823,250	£ 3,370,101	£ 255,080	£ 278,338	£ 113,844	£ 19,069	£ 5,859,682

(ii) *Boot Repairing, including Bespoke Work.* The introduction of small power plants in repairing shops has brought this class of establishment within the meaning of a factory for statistical purposes. Shops using small power plants have spread rapidly throughout Australia, and in 1941-42 the number amounted to 1,279 in which 2,356 persons were engaged in the industry. The sum of £209,984 was distributed in salaries and wages, and the output was valued at £1,084,303.



(iii) *Quantity and Value of Production.* The number and value of boots, shoes and slippers made at factories in each State are shown in the following table :—

### BOOT AND SHOE FACTORIES : OUTPUT, 1941-42.

Particulars.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
QUANTITY.								
Boots and shoes	pairs	6,300,940	8,862,141	881,797	1,077,333	476,907	70,803	17,669,921
Slippers ..	"	3,313,771	3,869,109	557,078	22,644	436,747	..	8,199,649
Uppers (c) ..	"	16,462	4,251	(a)	(a)	148	..	(b) 89,433
VALUE.								
Boots and shoes	£	3,839,096	6,005,405	561,262	716,260	318,797	53,954	11,494,774
Slippers ..	£	443,818	600,010	77,870	2,460	54,507	..	1,178,665
Uppers (c) ..	£	7,340	5,054	(a)	(a)	79	..	(b) 22,627

(a) Not available for publication.  
for other than factory use.

(b) Includes particulars for States marked (a).

(c) Made

23. *Grain-milling.*—(i) *Details for States, 1941-42.* The following table shows the position of the grain-milling industry in each State :—

### GRAIN-MILLING, 1941-42.

Item .		N.S.W.	Victoria.	Q'land.	S. Aust. (a)	W. Aust.	Tas. (a)	Australia.
Number of factories ..	..	53	36	9	37	18	10	163
Number of persons engaged ..	..	1,226	961	338	409	451	128	3,513
Value of land and buildings	£	818,741	656,432	185,709	167,814	251,766	70,782	2,154,244
Value of plant and machinery	£	686,559	508,082	136,017	223,898	180,334	24,165	1,759,355
Wages paid ..	£	360,835	271,217	94,582	110,987	120,028	30,042	987,691
Value of fuel used ..	£	80,710	62,196	19,690	32,603	38,220	4,904	238,323
Value of materials used	£	4,681,341	3,291,324	1,079,327	1,218,657	1,379,698	312,618	11,962,965
Total value of output	£	5,036,931	3,859,135	1,314,567	1,450,023	1,657,325	377,598	14,294,684
Value of production ..	£	873,980	505,615	215,550	198,768	239,407	60,076	2,093,396

(a) The manufacture of cornflour, oatmeal, etc., was also carried on in some of these establishments.

(ii) *Production of Flour and By-products, 1937-38 to 1941-42.* The production of flour by the mills in each State for the years indicated was as follows :—

### GRAIN-MILLING : PRODUCTION OF FLOUR.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	Tons.(a)	Tons.(a)	Tons.(a)	Tons.(a)	Tons.(a)	Tons.(a)	Tons.(a)
1937-38 ..	476,881	424,302	81,242	123,878	125,472	19,155	1,250,930
1938-39 ..	547,162	436,829	84,314	146,262	138,583	19,582	1,372,732
1939-40 ..	583,568	494,064	89,038	146,770	141,520	18,800	1,383,850
1940-41 ..	577,759	452,812	88,851	131,325	149,925	17,057	1,417,729
1941-42 ..	448,529	312,147	92,609	117,842	135,338	20,735	1,127,200

(a) Tons of 2,000 lb.

The production of flour in Australia for 1941-42, 1,127,200 tons, was valued at £10,676,482. In addition, 470,824 tons of bran and pollard, valued at £2,721,474, were made. The quantity of wheat ground was 56,513,878 bushels.

24. **Bakeries.**—Information regarding establishments in which the manufacture of bread, cakes, etc., was carried on in the year 1941-42 is given in the table below. It should be noted, however, that, as explained in § 1 par 2 p. 647 the details refer only to establishments coming within the definition of a factory. For that reason there are a large number of bakehouses omitted and consequently the table does not give complete details of the industry. This is true of all other industries covered by the statistics of manufacturing production but, in view of the omission of such a large number of establishments in this instance, special mention of this fact is deemed necessary.

#### BAKERIES (INCLUDING CAKES AND PASTRY), 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Australia.
Number of factories ..	808	592	257	154	143	81	2,035
Number of persons engaged ..	4,462	3,346	1,446	1,043	559	1,234	12,090
Value of land and buildings £	2,506,818	1,249,467	462,109	305,317	209,300	348,327	5,081,368
Value of plant and machinery £	630,144	442,782	153,072	138,355	61,618	132,516	1,550,087
Wages paid ..	924,341	667,975	242,658	195,398	103,407	205,114	2,338,893
Value of fuel used ..	169,774	109,454	30,469	31,070	18,124	26,514	392,311
Value of materials used ..	3,019,067	2,420,181	931,446	658,891	398,286	577,376	8,005,247
Total value of output ..	5,092,152	4,141,700	1,547,899	1,113,169	652,149	950,539	13,497,608
Value of production ..	1,903,311	1,612,065	579,984	422,302	236,129	346,459	5,160,950

(a) Includes Confectionery.

25. **Sugar-mills.**—(i) *Details for 1941-42.*—The following table shows the position of the cane-crushing branch of the sugar-making industry in New South Wales and Queensland in 1941-42. Sugar-cane is not grown in the other States. Details regarding the area, yield, etc., of sugar-cane will be found in Chapter XXII. "Agricultural Production".

#### SUGAR-MILLS, 1941-42.

Items.	N.S.W.	Queensland.	Australia.
Number of factories ..	3	33	36
Number of persons engaged ..	260	4,100	4,360
Value of land and buildings ..	£ 260,271	1,137,238	1,397,509
Value of plant and machinery ..	£ 991,577	7,171,668	8,163,245
Wages paid ..	£ 116,067	1,282,334	1,398,401
Value of fuel used ..	£ 25,951	132,975	158,926
Value of materials used ..	£ 535,952	9,458,615	9,993,667
Total value of output ..	£ 833,127	12,338,307	13,171,434
Value of production ..	£ 272,124	2,746,717	3,018,841

The products of the sugar-mill are raw sugar and molasses, the former being sent to the refineries in different parts of Australia for further treatment. Part of the molasses produced is used for distillation, part is prepared for human consumption, part is turned into food-cake for cattle, part is used for manuring land, and the balance is either burnt as fuel or is allowed to run to waste. The latter, however, is a diminishing quantity.

(ii) *Progress of Industry.* (a) *New South Wales.* The following table shows the progress which has been made in this industry in New South Wales since 1911 :—

#### SUGAR-MILLS : NEW SOUTH WALES.

Items.	1911.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories ..	4	3	3	3	3
Number of employees ..	469	212	200	306	260
Cane crushed .. tons	147,799	337,038	274,548	343,171	359,133
Sugar produced .. "	17,299	45,106	36,938	47,941	48,336
Molasses produced gals.	796,440	1,489,090	1,338,802	1,317,280	1,771,200

The concentration of cane-crushing in establishments fitted with modern machinery has caused the closing of the small home mill and thereby reduced the number of mills operating. The Government assistance, referred to in Chapter XXII. "Agricultural Production" has resulted in considerable progress in the cultivation of sugar-cane and increased activity in milling. Particulars regarding cane crushed and sugar produced embodied in these tables refer to the quantities treated during the years ended 30th June in each year, irrespective of the season in which the cane was grown; consequently the figures relating to cane crushed and sugar produced differ slightly from those given in Chapter XXII. "Agricultural Production" which relate to harvest years.

(b) *Queensland.* Details for Queensland for 1911 and the last four years are given hereunder:—

#### SUGAR-MILLS : QUEENSLAND.

Items	1911.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories ..	49	33	33	33	33
Number of persons engaged ..	4,295	4,419	4,519	4,506	4,100
Cane crushed .. tons	1,534,451	5,432,193	6,038,821	5,180,868	4,794,178
Sugar produced .. "	173,296	775,064	891,738	759,416	697,644
Molasses—					
Sold to distillers and others .. gals.	2,393,669	8,275,887	9,581,241	11,531,396	9,906,390
Used as fodder .. "	789,564	4,237,196	4,727,170	5,380,242	2,827,350
Used as manure .. "	223,000	3,293,543	4,295,289	3,334,372	1,499,250
Run to waste .. "	1,847,333 {	498,926	457,541	47,069	10,310
Burnt as fuel .. "		3,748,590	3,834,653	1,781,425	1,152,134
Sold or used for other purposes .. "		232,049	188,889	228,450	106,720
In stock .. "	1,197,626	..	..	..	..
Total molasses .. "	6,151,192	20,286,191	23,084,783	22,302,954	15,592,154

26. *Sugar Refineries.*—The establishment of the sugar-refining industry considerably antedates the establishment of the sugar-milling industry, the raw material operated on in the earlier years coming chiefly from Mauritius and the East. In 1941-42 there were two sugar refineries in each of the States of Victoria and Queensland, and one in each of the States of New South Wales, South Australia and Western Australia. The quantity of raw sugar treated amounted to 428,858 tons, for a yield of 414,859 tons of refined sugar, valued at £13,233,059.

27. *Confectionery Factories.*—(i) *Details for each State, 1941-42.* At the close of the year 1900 there were in New South Wales 16 establishments with 706 persons engaged and in Victoria 16 establishments, with 731 persons engaged, the plant and machinery in the former State being valued at £2,815, and in the latter at £19,070. The following figures for 1941-42 show the remarkable development since 1900:—

#### SUGAR CONFECTIONERY FACTORIES, (a) 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (b)	Australia.
Number of factories ..	70	71	19	17	8	1	186
Number of persons engaged ..	3,711	2,488	554	338	385	5	7,481
Value of land and buildings £	1,002,502	613,591	214,060	80,766	(c)	(c)	(d) 1,991,097
Value of plant and machinery £	865,196	556,497	107,809	53,368	(c)	(c)	(d) 1,653,210
Wages paid ..	717,103	499,924	86,062	43,414	(c)	(c)	(d) 1,403,263
Value of fuel used ..	69,943	57,364	12,612	10,323	(c)	(c)	(d) 157,975
Value of materials used ..	2,205,204	1,352,580	255,033	164,102	(c)	(c)	(d) 4,165,368
Total value of output ..	4,189,832	2,697,809	515,053	254,004	(c)	(c)	(d) 7,662,482
Value of production ..	1,914,625	1,287,865	246,808	79,489	(c)	(c)	(d) 3,639,139

(a) Includes Chocolate and Ice Cream.  
in Bakeries.

(b) Ice Cream factories—Other Confectionery included  
(c) Not available for publication.

(d) Includes particulars of States marked (c).



(ii) *Total for Australia, 1937-38 to 1941-42.*—Particulars of the confectionery industry during the last five years are shown in the following table :—

## SUGAR CONFECTIONERY FACTORIES(a) : AUSTRALIA.

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories .. ..	204	209	211	202	186
Number of persons engaged .. ..	8,235	8,276	8,205	8,193	7,481
Value of land and buildings .. ..	£ 2,042,198	2,079,601	2,067,466	2,172,872	1,991,097
Value of plant and machinery .. ..	£ 1,830,166	1,854,398	1,808,060	1,828,898	1,653,210
Wages paid .. ..	£ 1,179,223	1,231,375	1,264,929	1,360,498	1,403,263
Value of fuel used .. ..	£ 141,459	144,349	147,086	157,744	157,975
Value of materials used .. ..	£ 3,555,710	3,704,774	3,837,190	4,341,473	4,165,368
Total value of output .. ..	£ 6,660,655	7,107,045	7,457,814	8,100,217	7,962,482
Value of production .. ..	£ 2,963,486	3,257,922	3,473,538	3,601,000	3,639,139

(a) See notes to previous table.

The confectionery industry expanded rapidly during the war years of 1914-19, largely as a result of the stimulus afforded by the embargo placed on the importation of luxuries during that period. The industry, however, was seriously affected by the business depression but has now regained its former position. Confectionery establishments in Tasmania have been combined with bakeries in order to conceal confidential information. Production in Australia is sufficient to supply local requirements, and an export trade is being developed. Several large British manufacturers of confectionery have established branch works in Australia.

28. *Jam and Fruit Preserving, Pickles, Sauces and Vinegar Factories.*—(i) *Details for each State, 1941-42.* The following table gives particulars of factories included in this class for 1941-42 :—

## JAM AND FRUIT PRESERVING, PICKLES, ETC., FACTORIES, 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories .. ..	41	49	14	16	9	10	139
Number of persons engaged .. ..	2,644	3,967	555	544	94	957	8,761
Value of land and buildings .. ..	£ 494,499	745,373	58,054	115,671	23,562	147,432	1,584,591
Value of plant and machinery .. ..	£ 277,979	395,078	63,101	38,104	8,093	37,534	820,189
Wages paid .. ..	£ 555,968	847,893	105,986	80,692	14,772	207,709	1,822,020
Value of fuel used .. ..	£ 44,196	74,799	8,458	8,640	1,648	18,746	156,487
Value of materials used .. ..	£ 2,033,987	3,882,183	697,235	313,710	57,149	883,679	7,867,943
Total value of output .. ..	£ 3,442,711	5,807,778	941,090	473,112	92,210	1,251,793	12,010,694
Value of production .. ..	£ 1,364,528	1,850,796	235,397	152,762	33,413	349,368	3,986,264

(ii) *Total for Australia, 1937-38 to 1941-42.* Particulars in connexion with these establishments in Australia for the last five years are given hereunder :—

## JAM AND FRUIT PRESERVING, PICKLES, ETC., FACTORIES : AUSTRALIA.

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories .. ..	121	123	128	138	139
Number of persons engaged .. ..	6,596	6,476	7,249	7,699	8,761
Value of land and buildings .. ..	£ 1,309,014	1,382,150	1,502,256	1,546,101	1,584,591
Value of plant and machinery .. ..	£ 665,863	720,639	767,023	814,470	820,189
Wages paid .. ..	£ 1,143,190	1,148,991	1,300,029	1,483,118	1,822,020
Value of fuel used .. ..	£ 93,055	97,521	108,699	129,969	156,487
Value of materials used .. ..	£ 4,571,219	4,799,515	5,871,387	6,660,681	7,867,943
Total value of output .. ..	£ 6,974,291	7,230,914	8,947,287	10,303,543	12,010,694
Value of production .. ..	£ 2,310,017	2,333,878	2,966,701	3,512,893	3,986,264

The progress of the jam-making industry was very marked during the war years of 1914-19, when large quantities were exported overseas for the supply of army requirements. In the year 1918-19 the production amounted to 142,290,000 lb., but it had fallen to 90,140,000 lb. in 1920-21. During the succeeding years the production varied considerably, falling to 66,120,000 lb. in 1930-31 and subsequently improving to 150,952,649 lb. in 1941-42. The output of preserved fruit reached the record dimensions of 157,761,000 lb. in 1937-38. Production in 1941-42 was slightly lower at 131,821,958 lb. The production of pickles and sauces again showed a satisfactory improvement.

(iii) *Production.* The following table shows the quantity and value of jams, pickles and sauces manufactured in each State in 1941-42 :—

### JAMS, PRESERVED FRUIT, PICKLES AND SAUCES : OUTPUT, 1941-42.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
QUANTITY.							
Jams and Jellies .. '000 lb.	37,193	64,393	10,662	8,634	1,347	28,424	150,653
Fruit Pulp—							
Consumed in own works .. cwt.	20,819	47,207	7,108	9,374	3,189	1,317	89,014
For sale or addition to stock .. cwt.	73,062	92,608	4,029	2,925	1,665	120,798	295,087
Tomato Pulp—							
Consumed in own works .. cwt.	27,889	74,013	469	4,660	5,891	..	112,922
For sale or addition to stock .. cwt.	10,836	155,504	(a)	6,098	6,388	(a)	184,754
Fruit, preserved .. '000 lb.	23,310	73,923	26,742	2,988	4	4,855	131,822
Pickles .. '000 pints	3,059	3,737	500	2,177	269	30	9,712
Sauces .. " "	8,623	11,790	833	1,933	877	138	24,194
VALUE.							
Jams and Jellies .. £	1,022,259	1,610,774	310,834	185,731	34,288	711,549	3,875,435
Fruit, preserved .. £	587,752	1,513,998	474,732	61,885	78	89,789	2,728,234
Pickles .. £	147,340	139,800	24,446	86,494	6,977	1,125	397,182
Sauces .. £	460,343	439,804	35,332	65,558	25,153	2,529	1,028,719

(a) Not available for publication.

(b) Includes particulars for States marked (a).

29. *Bacon-curing Factories.*—(i) *Details for each State, 1941-42.* The table hereunder gives particulars of factories engaged in bacon-curing in each State for 1941-42 :—

### BACON-CURING FACTORIES, 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	27	16	8	9	7	11	78
Number of persons engaged ..	494	568	768	281	174	66	2,351
Value of land and buildings .. £	211,385	220,133	203,613	94,677	36,096	22,622	788,526
Value of plant and machinery .. £	66,446	106,997	124,047	34,177	21,199	9,161	362,027
Wages paid .. £	147,715	151,523	204,845	67,283	47,437	12,688	631,491
Value of fuel used .. £	17,263	21,807	27,938	14,450	10,287	1,638	93,383
Value of materials used .. £	1,315,878	1,060,084	1,565,533	441,566	576,983	124,293	5,084,337
Total value of output .. £	1,637,985	1,330,184	1,998,632	556,741	655,976	153,915	9,303,433
Value of production .. £	304,844	248,293	375,161	100,725	68,706	27,984	1,125,713

(ii) *Quantity and Value of Production.* The number of pigs cured and the quantity and value of the production of factories in each State for 1941-42 are given in the following table :—

**BACON-CURING FACTORIES : PIGS CURED AND PRODUCTION, 1941-42.**

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
<b>PIGS CURED.</b>							
Pigs cured on own account No.	290,053	187,421	289,933	99,486	77,341	24,050	959,887
Pigs cured on commission ..	22,328	2,190	1,475	563	839	538	27,933
<b>Total .. ..</b>	<b>312,381</b>	<b>189,614</b>	<b>291,408</b>	<b>91,049</b>	<b>78,180</b>	<b>25,188</b>	<b>987,820</b>

<b>PRODUCTS.</b>							
Bacon and ham .. '000 lb.	33,752	18,740	24,383	8,145	6,112	1,780	92,912
Lard .. ..	922	1,294	1,311	248	356	52	4,183

<b>VALUE.</b>							
Bacon and ham (a) £	1,968,089	1,006,806	1,280,299	392,823	284,937	80,887	5,025,841
Lard .. .. £	19,512	33,210	27,792	5,481	6,549	1,326	93,870

(a) Partly estimated.

Bacon and ham and other pig products are dealt with more fully in Chapter XXIII. "Farmyard, Dairy and Bee Products".

30. **Butter, Cheese and Condensed Milk Factories.**—(i) *Details for each State, 1941-42.* The following table gives particulars of butter, cheese and condensed milk factories in each State :—

**BUTTER, CHEESE AND CONDENSED MILK FACTORIES, 1941-42.**

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories ..	121	165	98	51	21	43	499
Number of persons engaged ..	1,764	3,899	1,384	708	260	219	8,234
Value of land and buildings £	738,500	1,406,777	738,138	231,286	83,317	60,172	3,258,229
Value of plant and machinery £	881,057	1,460,847	841,622	174,705	84,513	73,900	3,520,312
Wages paid ..	451,946	1,080,111	336,865	160,576	65,783	40,538	2,135,819
Value of fuel used ..	139,796	299,853	81,095	35,330	19,100	7,033	582,207
Value of materials used £	6,360,436	12,425,044	6,751,161	1,748,491	1,150,454	549,519	28,980,005
Total value of output ..	7,255,373	15,001,098	7,548,217	2,073,337	1,301,149	600,484	33,900,249
Value of production ..	755,141	2,272,901	715,961	289,513	191,586	103,935	4,329,037

(ii) *Total for Australia, 1937-38 to 1941-42.* The progress of industries included in this group during the last five years is set out hereunder :—

**BUTTER, CHEESE AND CONDENSED MILK FACTORIES : AUSTRALIA.**

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories ..	520	523	520	518	499
Number of persons engaged ..	6,655	6,851	7,259	7,680	8,234
Value of land and buildings ..	2,779,663	2,880,323	3,013,955	3,143,908	3,258,229
Value of plant and machinery ..	2,977,640	3,066,840	3,216,389	3,388,674	3,520,312
Wages paid ..	1,486,780	1,569,531	1,727,665	1,871,871	2,135,819
Value of fuel used ..	362,217	389,501	433,868	474,110	582,207
Value of materials used ..	27,187,350	29,161,083	31,654,120	30,153,314	28,980,005
Total value of output ..	31,056,156	33,094,851	36,313,543	34,704,895	33,900,249
Value of production ..	4,106,580	3,543,367	4,255,155	4,177,171	4,329,037



(iii) *Quantity and Value of Production.* The next table shows the quantities and values of butter, cheese and condensed milk produced in factories and the quantities of milk used in the manufacture of butter, cheese and condensed milk during 1941-42 :—

### BUTTER, CHEESE AND CONDENSED MILK FACTORIES : PRODUCTION, 1941-42.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
MILK USED (,000 OMITTED).							
For the manufacture of—							
Butter .. gals.	168,915	303,832	195,402	34,250	32,501	16,565	751,465
Cheese .. "	5,371	22,958	15,408	18,116	1,182	2,948	65,983
Condensed, &c., Milk .. "	15,376	44,500	..	(a)	(a)	..	(b)63,070
PRODUCTS (,000 OMITTED).							
Butter .. lb.	85,116	137,890	95,675	17,722	15,659	8,059	360,121
Cheese .. "	5,225	22,484	(c) 16,334	18,903	1,299	3,069	67,314
Condensed and concentrated milk .. lb.	26,068	79,385	..	(a)	(a)	..	b117,505
Powdered milk .. "	6,631	33,479	..	..	..	..	40,110
VALUE (,000 OMITTED).							
Butter .. £	5,509	8,913	6,138	1,131	1,091	516	23,298
Cheese .. £	222	814	(c) 607	721	57	113	2,534
Condensed and concentrated milk .. £	471	2,127	..	(a)	(a)	..	(b) 2,955
Powdered milk .. £	328	1,305	..	..	..	..	1,633

(a) Not available for publication. (b) Includes particulars for States marked (a). (c) Includes 1,417,653 lb. of cheese, valued at £55,871, made in establishments not classified as factories.

The butter, cheese and condensed milk industries are dealt with more fully in Chapter XXIII. "Farmyard, Dairy and Bee Products".

31. *Meat and Fish Preserving Works.*—The industries included in this group are engaged chiefly in the freezing and preserving of meat. Works have been established at the seaports for the purpose of handling beef, lamb and mutton for export, and insulated space for the carriage of chilled and frozen produce is provided by steamship companies trading between Australia and other parts of the world. The substitution of chilled for frozen meat exported has already been referred to in Chapter XXI. "Pastoral Production".

### MEAT AND FISH PRESERVING WORKS,(a) 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	8	11	13	3	5	3	43
Number of persons engaged ..	920	1,039	5,139	80	106	43	7,327
Value of land and buildings £	93,239	108,101	1,616,040	7,973	399,013	21,810	2,246,176
Value of plant and machinery £	94,143	74,100	955,477	8,553	401,177	20,405	1,553,855
Wages paid ..	197,931	254,393	1,594,686	18,251	65,748	9,777	2,140,786
Value of fuel used ..	19,379	17,436	199,427	1,046	8,612	1,015	246,915
Value of materials used ..	1,018,547	1,721,924	7,988,333	141,467	166,194	12,724	11,049,189
Total value of output ..	1,300,510	2,240,701	10,386,759	178,469	276,556	33,892	14,476,887
Value of production ..	£ 322,584	501,341	2,198,999	35,956	101,750	20,153	3,180,783

(a) Includes meat extracts.

Particulars regarding the quantities and values of beef, mutton and lamb preserved by cold process exported from Australia over a series of years will be found in Chapter XXI. "Pastoral Production".

32. **Breweries.**—(i) *Details for each State, 1941-42.* The following table gives particulars relating to breweries in each State :—

**BREWERIES, 1941-42.**

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	6	8	6	5	6	2	33
Number of persons engaged ..	1,125	1,726	439	292	514	83	4,179
Value of land and buildings £	1,165,111	772,397	490,303	(a)	295,326	(a)	b 3,199,023
Value of plant and machinery £	808,842	899,401	384,714	(a)	334,729	(a)	b 2,856,982
Wages paid ..	368,867	634,350	145,237	(a)	174,776	(a)	b 1,462,743
Value of fuel used ..	98,024	101,549	39,096	(a)	33,937	(a)	b 310,574
Value of materials used ..	1,508,752	1,954,969	494,581	(a)	416,495	(a)	b 4,821,610
Total value of output ..	4,492,784	3,504,521	1,114,091	(a)	1,077,147	(a)	b 11,212,151
Value of production ..	2,886,008	1,448,003	580,411	(a)	626,715	(a)	b 6,079,967

(a) Not available for publication.

(b) Includes particulars for States marked (a).

(ii) *Total for Australia, 1937-38 to 1941-42.* The next table shows the extent of this industry for the last five years :—

**BREWERIES : AUSTRALIA.**

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories ..	35	34	34	33	33
Number of persons engaged ..	3,532	3,698	3,848	4,107	4,179
Value of land and buildings ..	£ 2,678,983	2,801,147	2,851,337	3,048,505	3,199,623
Value of plant and machinery ..	£ 2,642,636	2,737,042	2,778,290	2,881,920	2,856,982
Wages paid ..	£ 1,148,487	1,215,473	1,270,295	1,317,754	1,462,743
Value of fuel used ..	£ 234,923	251,286	272,821	283,288	310,574
Value of materials used ..	£ 3,217,511	3,406,572	3,566,300	4,347,747	4,821,610
Total value of output ..	£ 8,507,086	9,030,309	9,509,295	10,786,546	11,212,151
Value of production ..	£ 5,054,652	5,372,451	5,670,084	6,155,511	6,079,967

The quantity of ale, stout and beer brewed fell from 73.7 million gallons in 1928-29 to 49.8 million gallons in 1931-32, but thereafter the production increased each year to 109,155,107 gallons in 1941-42. For a number of years prior to the depression the consumption of ale, stout and beer exceeded 11 gallons per head of the population; it dropped to 7.32 gallons in 1931-32, but has since risen to 13.76 gallons in 1941-42 and declined to 12.58 gallons in 1942-43.

(iii) *Materials Used and Production.* The table below shows the quantities of raw materials used and the quantity and value of ale, stout and beer brewed in each State during 1941-42.

**BREWERIES : MATERIALS USED AND PRODUCTION, 1941-42.**

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
<b>RAW MATERIAL USED.</b>							
Malt .. bushels	1,293,395	1,226,263	307,112	(b)	284,630	(b)	(c) 3,501,114
Hops .. lb.	976,871	964,736	243,679	(b)	185,003	(b)	(c) 2,676,502
Sugar .. cwt.	175,400	152,480	33,680	(b)	21,440	(b)	(c) 426,000

**RAW MATERIAL USED PER 1,000 GALLONS OF ALE, STOUT AND BEER PRODUCED.**

Malt .. bushels	30.01	32.39	33.01	35.74	33.95	41.76	32.10
Hops .. lb.	22.67	25.49	26.20	30.34	22.14	24.31	24.54
Sugar .. cwt.	4.07	4.03	3.62	4.47	2.56	2.69	3.91

**ALE, STOUT AND BEER BREWED.**

Quantity gallons	43,093,051	37,853,034	9,301,652	(b)	8,384,387	(b)	c 109,155,107
Value (a) £	4,438,736	3,477,000	1,112,101	(b)	1,044,783	(b)	c 11,090,144

(a) Excludes Excise duty.

(b) Not available for publication.

(c) Includes particulars for States marked (b).

33. **Distilleries.**—Distilleries are located in all the States except Western Australia and Tasmania. The following information, which has been furnished by the Excise Branch of the Department of Trade and Customs, shows the materials used in distilleries in Australia and the quantity of spirits distilled therefrom for the year 1941-42:—  
Materials used; barley, 77,604 bushels; barley malt, 192,979 bushels; molasses, 1,620,391 cwt.; wine, 10,464,798 gallons; raisins and currants, 28,935 cwt.; grapes, 75,169 cwt. The quantity of spirits distilled, in terms of proof gallons, was, from barley, malt and grain, 958,009 gallons; from molasses, 17,056,871 gallons; from wine, 2,170,582 gallons; and from other materials, 76,260 gallons or a total of 20,261,719 proof gallons. The quantity of spirits denatured during the year was 14,758,311 proof gallons.

34. **Tobacco, etc., Factories.**—(i) *Details for each State, 1941-42.* During 1941-42 there were 24 establishments in which the manufacture of tobacco, cigars or cigarettes was carried on. There are no tobacco factories in Tasmania.

#### TOBACCO, CIGAR AND CIGARETTE FACTORIES, 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S Aust.	W. Aust.	Australia.
Number of factories .. ..	7	11	4	I	I	24
Number of persons engaged ..	3,074	2,278	31	11	177	5,571
Value of land and buildings ..	£ 619,785	346,510	(a)	(a)	(a)	(b) 992,218
Value of plant and machinery ..	£ 548,111	300,954	(a)	(a)	(a)	(b) 868,050
Wages paid .. ..	£ 678,328	520,393	(a)	(a)	(a)	(b) 1,227,592
Value of fuel used .. ..	£ 27,104	11,747	(a)	(a)	(a)	(b) 39,743
Value of materials used .. ..	£ 5,594,405	2,849,519	(a)	(a)	(a)	(b) 8,516,671
Total value of output .. ..	£ 7,423,873	4,495,754	(a)	(a)	(a)	(b) 12,062,052
Value of production .. ..	£ 1,802,364	1,634,488	(a)	(a)	(a)	(b) 3,505,638

(a) Not available for publication.

(b) Includes particulars for States marked (a).

(ii) *Total for Australia.* This industry was among the first to be established in Australia. In 1861 New South Wales had eleven factories, producing 177,744 lb. of manufactured tobacco; in the same year there was one factory in Victoria, but the quantity of tobacco manufactured is not available. The Australian market has for many years been largely supplied with local manufactures from the imported leaf. Imports during 1941-42 comprised—manufactured tobacco 384,267 lb., cigars 396 lb., and cigarettes 128,684 lb., and the quantities manufactured in Australian factories were respectively 17,682,957 lb., 233,658 lb., and 8,712,827 lb. The following tables show the extent of the industry in Australia for the last five years:—

#### TOBACCO, CIGAR AND CIGARETTE FACTORIES: AUSTRALIA.

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories .. ..	32	30	24	25	24
Number of employees .. ..	5,644	5,544	5,473	5,509	5,571
Value of land and buildings ..	£ 1,030,344	1,041,798	1,019,160	1,002,483	992,218
Value of plant and machinery ..	£ 932,827	942,644	910,204	895,125	868,050
Wages paid .. ..	£ 1,074,196	1,095,912	1,085,548	1,098,773	1,227,592
Value of fuel used .. ..	£ 34,344	34,483	36,203	36,683	39,743
Value of materials used .. ..	£ 6,861,305	7,080,574	7,194,063	7,787,045	8,516,671
Total value of output .. ..	£ 9,510,121	9,800,433	10,239,867	10,994,180	12,062,052
Value of production .. ..	£ 2,614,472	2,685,356	3,009,601	3,170,452	3,505,638

#### LEAF USED AND PRODUCTION.

Leaf used { Australian (Stemmed) .. ..	'000 lb.	4,231	4,489	4,730	4,889	4,925
Imported ( " ) .. ..	"	15,993	16,011	16,521	16,813	18,239
Tobacco made .. ..	"	16,259	16,305	16,570	16,372	17,683
Cigars made .. ..	"	256	238	208	224	234
Cigarettes made .. ..	"	6,325	6,731	7,282	7,806	8,713

For many years the production of locally-grown leaf was comparatively small, and manufacturers were dependent on imported leaf for the supply of their raw material. Increased duties stimulated local production, and the quantity of Australian leaf used by



manufacturers rose from 1.2 million lb. in 1929-30 to over 3 million lb. in 1930-31; in 1932-33 the quantity of local leaf used fell to 2.7 million lb., but it has since risen to 4.9 million lb. in 1941-42. In this connexion, see Chapter XXII. "Agricultural Production".

35. Sawmills, etc.—(i) *Details for States, 1941-42.* The most important industry in Class X. is that of sawmilling. As separate particulars of forest sawmills are not available for some of the States, both forest and town sawmills, as well as plywood and bark mills, have been combined in the following table:—

#### SAWMILLS, FOREST AND TOWN; PLYWOOD AND BARK MILLS, 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	572	301	367	49	127	211	1,627
Number of persons engaged ..	6,009	4,102	5,973	1,148	2,044	1,770	21,046
Value of land and buildings £	763,318	495,567	388,878	218,541	202,001	104,978	2,083,313
Value of plant and machinery ..	£ 738,744	674,860	685,951	200,709	405,412	269,808	2,975,484
Wages paid ..	£ 1,331,567	1,010,826	1,226,153	280,700	493,347	350,310	4,701,909
Value of fuel used ..	£ 78,670	70,380	65,088	14,411	38,305	25,200	292,024
Value of materials used ..	£ 3,259,784	2,074,480	2,380,380	911,880	729,873	584,180	9,946,601
Total value of output ..	£ 5,494,054	3,800,171	4,381,328	1,406,918	1,525,600	1,155,197	17,824,477
Value of production ..	£ 2,150,500	1,715,611	1,929,881	480,621	757,431	515,808	7,585,852

(ii) *Total for Australia, 1937-38 to 1941-42.* The development of forest and other sawmills, etc., since 1937-38 is shown in the following table:—

#### SAWMILLS, FOREST AND TOWN: PLYWOOD AND BARK MILLS: AUSTRALIA.

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of establishments ..	1,659	1,660	1,621	1,594	1,627
Number of persons engaged ..	19,565	19,104	19,742	20,607	21,046
Value of land and buildings ..	£ 2,025,857	2,054,611	2,047,363	2,001,873	2,083,313
Value of plant and machinery ..	£ 2,807,747	2,785,716	2,818,503	2,892,865	2,975,484
Wages paid ..	£ 3,601,453	3,634,627	3,872,262	4,214,338	4,701,909
Value of fuel used ..	£ 225,537	225,782	244,530	260,061	292,024
Value of materials used ..	£ 8,975,242	8,522,895	9,356,918	9,550,006	9,946,601
Total value of output ..	£ 15,092,088	14,537,888	15,816,593	16,573,182	17,824,477
Value of production ..	£ 5,891,309	5,789,211	6,215,145	6,763,115	7,585,852

The sawmill output of native timber, which declined from 740 million super. feet in 1925-26 to the abnormally low figure of 237 million super. feet during the depth of the depression, had recovered to 914 million super. feet in 1941-42. Further reference is made to the sawmilling industry in Chapter XXIV. "Forestry".

36. Furniture, Cabinet-making, and Upholstery.—These industries constitute the principal manufactures in Class XI. The following table gives particulars for each State in 1941-42:—

#### FURNITURE, CABINET-MAKING AND UPHOLSTERY FACTORIES, 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	217	272	94	71	78	34	766
Number of persons engaged ..	3,719	2,846	1,302	947	513	311	9,638
Value of land and buildings ..	£ 707,171	638,705	223,448	122,883	112,521	42,687	1,847,415
Value of plant and machinery ..	£ 196,051	134,057	63,453	52,284	27,458	13,617	487,520
Wages paid ..	£ 957,857	628,912	287,099	191,334	101,955	54,064	2,221,221
Value of fuel used ..	£ 26,848	18,245	7,347	6,858	2,726	1,314	63,338
Value of materials used ..	£ 1,611,957	1,143,989	445,707	333,630	181,666	68,073	3,785,022
Total value of output ..	£ 3,086,038	2,296,287	870,245	641,702	358,189	148,639	7,401,100
Value of production ..	£ 1,447,233	1,134,053	417,191	301,214	173,797	79,252	3,552,740

37. **Printing Works.**—Printing and bookbinding works rank high in importance among the industries of Australia, and in 1941-42 afforded employment for about 24,700 employees, and paid nearly £5,900,000 in salaries and wages, while the value of output amounted to £17,941,000. The following table gives particulars of establishments engaged in general printing in each State for 1941-42. These establishments include those engaged in lithographic printing, the printing of periodicals, excepting those which may be produced by newspapers, bookbinding, paper ruling and linotyping. Government printing works are included, but establishments producing newspapers and weekly publications are shown separately in the following table:—

#### GOVERNMENT AND GENERAL PRINTING WORKS, 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	335	392	86	64	71	19	967
Number of persons engaged ..	6,354	6,146	1,543	1,023	753	416	16,235
Value of land and buildings	£ 1,495,157	£ 1,731,456	£ 347,973	£ 218,980	£ 211,878	£ 79,623	£ 4,085,067
Value of plant and machinery	£ 1,266,804	£ 1,106,889	£ 181,979	£ 210,270	£ 151,799	£ 77,979	£ 2,995,726
Wages paid ..	£ 1,396,929	£ 1,330,816	£ 297,389	£ 199,076	£ 151,871	£ 88,602	£ 3,464,683
Value of fuel used ..	£ 39,806	£ 45,449	£ 10,399	£ 7,990	£ 5,179	£ 2,377	£ 111,200
Value of materials used	£ 2,014,637	£ 1,965,893	£ 337,706	£ 225,400	£ 192,644	£ 75,800	£ 4,812,080
Total value of output	£ 4,577,751	£ 4,384,922	£ 850,391	£ 550,115	£ 509,104	£ 231,873	£ 11,104,156
Value of production ..	£ 2,523,308	£ 2,373,580	£ 502,286	£ 316,725	£ 311,281	£ 153,696	£ 6,180,876

#### ESTABLISHMENTS PRODUCING NEWSPAPERS (INCLUDING WEEKLY PUBLICATIONS), 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	197	114	55	35	32	6	439
Number of persons engaged ..	3,920	1,941	1,271	573	452	286	8,443
Value of land and buildings	£ 1,764,309	£ 789,822	£ 524,098	£ 355,592	£ 274,983	£ 40,216	£ 3,749,020
Value of plant and machinery	£ 1,603,036	£ 555,861	£ 358,794	£ 205,579	£ 106,716	£ 39,785	£ 2,869,771
Wages paid ..	£ 1,188,151	£ 559,891	£ 323,781	£ 159,895	£ 136,981	£ 54,790	£ 2,423,489
Value of fuel used ..	£ 52,869	£ 28,500	£ 19,397	£ 8,000	£ 7,920	£ 2,805	£ 119,491
Value of materials used	£ 1,310,137	£ 674,991	£ 265,844	£ 157,431	£ 111,336	£ 35,332	£ 2,555,071
Total value of output	£ 3,461,664	£ 1,590,387	£ 812,367	£ 409,135	£ 344,019	£ 219,305	£ 6,836,877
Value of production ..	£ 2,098,658	£ 886,896	£ 527,126	£ 243,704	£ 224,763	£ 181,168	£ 4,162,315

38. **Tyres, Motor and Cycle.**—(i) *Details for each State, 1941-42.* During the last decade, the number of motor car and cycle users has shown a considerable advance and this necessarily has had a stimulating effect on the industry engaged in the manufacture of motor and cycle tyres. Particulars for each State during 1941-42 are shown hereunder:—

#### TYRES, MOTOR AND CYCLE, 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	84	59	29	23	17	14	226
Number of persons engaged ..	3,333	3,086	138	104	71	61	6,793
Value of land and buildings	£ 679,397	£ 609,742	£ 68,443	£ 48,512	£ 37,699	£ 29,926	£ 1,473,719
Value of plant and machinery	£ 421,289	£ 766,575	£ 19,940	£ 13,117	£ 8,959	£ 7,044	£ 1,236,924
Wages paid ..	£ 926,288	£ 879,756	£ 20,320	£ 17,616	£ 10,689	£ 7,817	£ 1,862,486
Value of fuel used ..	£ 99,466	£ 154,545	£ 3,638	£ 2,595	£ 1,205	£ 1,146	£ 262,595
Value of materials used	£ 2,403,501	£ 3,258,291	£ 61,923	£ 39,415	£ 25,699	£ 16,337	£ 5,865,169
Total value of output	£ 3,820,290	£ 5,088,293	£ 122,673	£ 86,005	£ 58,089	£ 41,409	£ 9,217,359
Value of production ..	£ 1,257,320	£ 1,675,457	£ 57,112	£ 43,995	£ 31,785	£ 23,926	£ 3,089,595

(a) Includes Boots and Shoes and Other Rubber Goods.

(ii) *Total for Australia, 1937-38 to 1941-42.* Prior to 1930-31 particulars regarding this industry were included with Rubber Goods but separate details are now collected and are shown in the following table for the five years ended 1941-42 :—

### TYRES, MOTOR AND CYCLE(a) : AUSTRALIA.

Items.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
Number of factories .. ..	267	262	259	242	226
Number of persons engaged .. ..	5,847	5,723	5,894	6,411	6,793
Value of land and buildings .. ..	£ 1,587,808	1,441,131	1,456,250	1,446,074	1,473,719
Value of plant and machinery .. ..	£ 1,296,315	1,174,012	1,186,291	1,261,985	1,236,924
Wages paid .. ..	£ 1,187,061	1,196,897	1,256,712	1,441,930	1,862,486
Value of fuel used .. ..	£ 212,533	210,920	218,236	223,498	262,595
Value of materials used .. ..	£ 4,533,656	3,645,799	4,484,377	4,894,576	5,865,169
Total value of output .. ..	£ 6,849,686	6,186,688	7,283,453	7,585,359	9,217,359
Value of production .. ..	£ 2,103,497	2,329,969	2,580,540	2,467,285	3,089,595

(a) Includes Boots and Shoes and Other Rubber Goods for Tasmania.

39. **Electric Light and Power Works.**—(i) *Details for each State, 1941-42.* The increased demand for electrical energy has been responsible for considerable development in electric light and power works during recent years. Since 1931-32 the production of electric light and power has increased from 2,507 to 6,281 million British units, or by 151 per cent. Particulars for the year 1941-42 are as follows :—

### ELECTRIC LIGHT AND POWER WORKS, 1941-42.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	96	71	48	44	109	4	372
Number of persons engaged .. ..	2,315	1,418	627	618	593	106	5,677
Value of land and buildings .. ..	£ 4,498,738	2,059,536	553,558	614,592	457,033	439,975	8,623,432
Value of plant and machinery .. ..	£ 12,246,865	8,119,400	1,776,611	2,090,377	2,225,250	3,058,582	29,517,085
Wages paid .. ..	£ 811,518	485,283	197,559	178,152	194,380	32,066	1,808,958
Value of fuel used .. ..	£ 2,027,890	852,843	539,318	522,096	758,483	..	4,700,630
Value of materials used .. ..	£ 309,834	76,036	56,446	56,776	39,671	10,250	540,613
Total value of output .. ..	£ 7,370,960	3,415,892	1,250,201	1,329,798	1,395,737	117,271	14,858,859
Value of production .. ..	£ 5,042,236	2,486,413	654,437	750,926	567,583	107,021	9,608,616

Particulars of the types of engines and generators installed in Electric Light and Power Works and their rated horse-power are given on p. 652.

(ii) *Production, 1937-38 to 1941-42.* The increase in the production of electric light and power in each of the States during the five years is clearly shown in the following table :—

### ELECTRIC LIGHT AND POWER WORKS : PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	'000 K.W.H.	'000 K.W.H.	'000 K.W.H.	'000 K.W.H.	'000 K.W.H.	'000 K.W.H.	'000 K.W.H.
1937-38 .. ..	1,816,814	1,128,216	352,258	240,902	272,512	542,767	4,353,469
1938-39 .. ..	1,948,490	1,222,505	387,363	256,283	307,002	566,691	4,688,339
1939-40 .. ..	2,145,447	1,389,783	421,662	270,414	336,805	615,448	5,179,559
1940-41 .. ..	2,405,118	1,550,169	456,715	304,372	353,369	669,970	5,739,713
1941-42 .. ..	2,656,244	1,684,562	481,189	385,041	347,009	726,475	6,280,520



40. **Gas-works.**—(i) *Details for each State, 1941-42.* Gas-works are in operation in the majority of important towns in Australia. New South Wales returned eight coke factories and Queensland two, working as separate industries, but under the present classification these are included in Class I.—Treatment of Non-metalliferous Mine and Quarry Products. The following table gives particulars of gas-works in each State for the year 1941-42 :—

## GAS-WORKS, 1941-42.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	42	39	16	3	4	2	106
Number of persons engaged ..	1,160	960	243	301	122	53	2,839
Value of land and buildings £	711,889	431,306	185,128	25,009	(a)	(a)	1,353,341
Value of plant and machinery £	2,995,682	2,512,110	554,022	1,126,427	(a)	(a)	7,188,341
Wages paid ..	348,186	290,597	72,777	89,300	(a)	(a)	790,860
Value of fuel used ..	240,343	30,809	5,495	1,660	(a)	(a)	278,307
Value of materials used ..	1,101,326	1,149,831	191,883	248,495	(a)	(a)	2,691,535
Total value of output ..	3,085,279	1,872,474	423,586	396,846	(a)	(a)	5,774,987
Value of production ..	1,743,610	691,834	226,208	146,691	(a)	(a)	2,808,343

(a) Not available for publication.

(b) Includes particulars for States marked (a).

(ii) *Coal Used and Production, 1941-42.* The following table gives details for 1941-42 :—

## GAS-WORKS : COAL USED AND PRODUCTION, 1941-42.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
COAL USED.							
Coal .. .. tons	689,458	522,067	101,381	101,110	(a)	(a)	1,414,016
PRODUCTS.							
Gas produced ,000 cubic ft.	12,290,106	9,280,804	1,641,118	1,496,373	(a)	(a)	24,708,401
Gas sold ,000 cubic ft.	10,316,665	8,486,844	1,447,773	1,272,367	(a)	(a)	21,523,653
Coke produced .. tons	127,673	205,821	56,835	64,745	(a)	(a)	455,074
Coke for sale .. tons	279,550	183,997	29,354	43,141	(a)	(a)	535,042
VALUE.							
Gas sold ..	£ 2,434,612	2,392,273	583,536	565,005	(a)	(a)	5,975,426
Coke for sale ..	£ 320,568	332,840	36,797	103,251	(a)	(a)	793,456

(a) Not available for publication.

(b) Includes particulars for States marked (a).

The output of gas declined from 20,929,569 thousand cubic feet in 1929-30 to an average of 17,800,000 thousand cubic feet during the three years ended 1933-34, but has since risen each year to a new high level of 25,744,301 thousand cubic feet in 1941-42.

## CHAPTER XX. MINERAL INDUSTRY.

### § 1. The Mineral Wealth of Australia.

1. *Place of Mining in Australian Development.*—The value of production from the mineral industry is now considerably less than that returned by the agricultural, the pastoral or the dairying industry, nevertheless it was the discovery of gold in payable quantities that first attracted population to Australia in large numbers and thus accelerated its national development.

2. *Extent of Mineral Wealth.*—The extent of the total mineral wealth of Australia cannot yet be regarded as completely ascertained, as large areas of country still await systematic prospecting. More detailed reference to this matter will be found in preceding issues of the Official Year Book. (See No. 22, p. 755.)

During the years 1934 to 1940, a survey of certain areas in Australia north of the 22nd parallel of south latitude was undertaken by the Governments of the Commonwealth, Queensland and Western Australia. This survey is referred to in § 16 below.

3. *Quantity and Value of Production in 1942.*—The quantities (where available) and the values of certain of the principal minerals produced in each State, and in Australia as a whole, during 1942 are given in the tables immediately following. It must be clearly understood that the figures quoted in these tables refer to the quantities and values of the various minerals in the form in which they were reported to the State Mines Departments, and represent amounts which the Mines Departments consider may fairly be taken as accruing to the mineral industry as such. They are not to be regarded as representative of Australia's potentiality as a producer of *metals*, this matter being dealt with separately in § 17 below. New South Wales is, of course, in normal times, a large producer of iron and steel from ironstone mined in South Australia. As the table shows, the latter State receives credit for this ironstone in its mineral returns. The iron and steel produced therefrom cannot be assigned to the mineral industry of New South Wales, but the value of the transformation from ore to metal is credited to the manufacturing industry of that State. Similarly lead, silver lead, cadmium, cobalt and zinc are credited in the form reported to the State of origin—chiefly New South Wales—although the actual metal extraction is carried out principally in South Australia and Tasmania.

The quantities of cadmium and cobalt recovered in Tasmania from zinc ores mined in New South Wales during 1942 are given in § 9 pars. 2 and 3 page 729.

#### MINERAL PRODUCTION : QUANTITIES, 1942.

Mineral.	Unit.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Australia.
Alunite ..	ton	1,137	..	..	3,571	..	..	..	4,708
Antimony ..	"	443	10	23	..	884	..	..	1,360
Arsenic ..	"	..	..	..	..	2,727	..	..	2,727
Asbestos ..	cwt.	760	..	..	1,260	2,380	140	..	4,540
Barytes ..	ton	2,839	..	..	..	..	..	..	2,839
Bismuth ..	cwt.	4	..	37	..	..	4	..	45
Cadmium ..	ton	(a)	..	..	..	..	41	..	41
Coal ..	..	..	..	..	..	..	..	..	..
Black ..	ton	12,236,219	312,854	1,637,148	1,650	581,176	134,442	..	14,903,489
Brown ..	"	..	4,933,861	..	..	..	..	..	4,933,861
Copper (Ingot, Matte, etc.) ..	"	3,144	..	6,331	392	47	11,785	..	21,699
Chalk, Talc, Soapstone, etc. ..	"	1,332	..	..	2,536	38	..	..	3,906
Diatomaceous earth ..	"	3,684	414	144	..	..	..	..	4,242
Felspar ..	"	1,446	..	..	1,010	3,252	..	..	5,708
Fireclay ..	"	..	..	..	10,012	798	..	..	10,810
Flint pebbles ..	"	..	..	..	185	..	..	..	185
Glaucinite ..	"	..	..	..	..	260	..	..	260
Gold ..	fine oz.	77,249	101,497	95,117	1,333	848,180	18,353	12,058	1,153,787
Gypsum ..	ton	19,255	8,986	..	57,206	2,878	..	..	88,325
Ironstone ..	"	2,429	22	3,755	2,122,052	150	..	..	2,128,408
Kaolin ..	"	..	6,012	..	1,640	..	1,098	..	8,750
Lead ..	"	(a)	..	33,512	..	..	9,360	..	(b) 42,872
Limestone flux ..	"	323,143	1,058	15,299	70,340	..	168,603	..	578,443
Magnesite ..	"	34,053	13	367	862	25	..	..	35,320

(a) See letterpress preceding this table.

(b) Incomplete.

## MINERAL PRODUCTION: QUANTITIES, 1942—continued.

Mineral.	Unit.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Australia.
Manganese Ore ..	ton	780	..	..	9,327	..	..	..	10,107
Molybdenite ..	cwt.	17	60	184	..	..	..	..	261
Ochre and other pigment clays ..	ton	1,692	..	..	..	143	21	1,051	2,907
Osmiridium ..	oz.	..	..	..	..	..	142	..	142
Phosphate ..	ton	116	..	..	13,958	..	..	..	14,074
Platinum ..	oz.	2	..	..	..	..	..	..	2
Salt, crude ..	ton	..	(c)	(c)	174,176	(c)	..	..	(b) 174,176
Shale Oil ..	..	117,324	..	..	..	..	..	..	117,324
Silica ..	..	98,767	..	74	13,635	111	7,308	..	119,895
Silver ..	oz.	(a) 179,038	17,029	3,055,435	3,613	188,421	1,190,061	..	4,633,597
Silver-Lead Ore, etc.	ton	289,198	..	..	..	..	..	..	289,198
Tin and Tin Ore ..	..	1,175	84	746	..	23	1,148	32	3,208
Wolfram ..	cwt.	760	42	3,803	..	4	3,660	3,016	11,285
Zinc and Concentrates ..	ton	273,368	..	21,035	..	..	21,472	..	315,875

(a) See letterpress preceding this table.

(b) Incomplete.

(c) Not available.

The values of the minerals raised in each State in 1942 are given in the following table:—

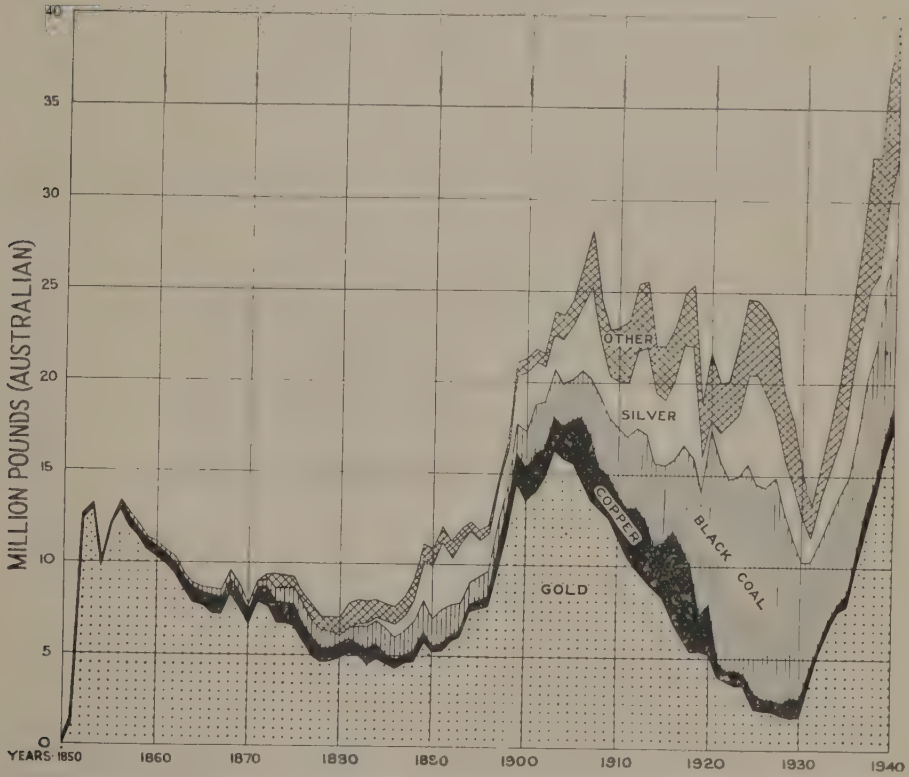
## MINERAL PRODUCTION: VALUES, 1942.

Mineral.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	N.T.	Australia.
	£	£	£	£	£	£	£	£
Alunite ..	2,060	..	..	11,006	..	..	..	13,066
Antimony ..	14,204	300	644	..	43,089	..	..	58,237
Arsenic ..	..	..	..	..	57,267	..	..	57,267
Asbestos ..	5,070	..	..	943	5,788	20	..	11,821
Barytes ..	4,163	..	..	..	..	..	..	4,163
Bismuth ..	176	..	691	..	..	10	..	877
Cadmium ..	(b)	..	..	..	..	18,462	..	(c) 18,462
Coal—								
Black ..	9,472,363	411,107	1,698,231	1,650	461,495	108,241	..	12,153,087
Brown ..	..	469,699	..	..	..	..	..	469,699
Copper (Ingot, Matte, etc.) ..	277,376	..	625,375	31,715	738	730,675	..	1,665,879
Chalk, Talc, Soapstone, etc. ..	2,730	..	..	8,704	57	..	..	11,491
Diamonds ..	337	..	..	..	..	..	..	337
Diatomaceous earth ..	3,211	1,384	360	..	..	..	..	4,955
Felspar ..	3,624	..	..	2,459	9,734	..	..	15,817
Fireclay ..	..	..	..	6,257	449	..	..	6,706
Flint pebbles ..	..	..	..	1,028	..	..	..	1,028
Gems ..	..	..	1,612	..	..	..	..	1,612
Glauconite ..	..	..	..	..	6,500	..	..	6,500
Gold ..	807,436	1,060,910	994,214	13,930	8,865,806	191,835	126,035	12,060,166
Gypsum ..	10,209	4,932	..	42,905	3,136	..	..	61,182
Ironstone ..	2,289	5	2,677	2,440,560	225	..	..	2,445,556
Kaolin ..	..	6,675	..	2,460	..	1,334	..	10,469
Lead ..	(b)	..	630,977	35,108	..	234,011	..	(c) 900,096
Limestone flux ..	67,305	304	15,974	..	..	63,878	..	147,461
Magnesite ..	75,921	48	275	1,717	100	..	..	78,061
Manganese Ore ..	4,762	..	..	26,776	..	..	..	31,538
Molybdenite ..	294	999	3,059	..	..	..	..	4,352
Ochre and other pigment clays ..	2,855	..	..	..	1,360	53	3,416	7,684
Opal ..	800	..	..	5,976	..	..	..	6,776
Osmiridium ..	..	..	..	..	..	2,930	..	2,930
Phosphate ..	173	..	..	17,511	..	..	..	17,684
Platinum ..	30	..	..	..	..	..	..	30
Salt, crude ..	..	(d)	(d)	348,352	(d)	..	..	(c) 348,352
Shale Oil ..	142,343	..	..	..	..	..	..	142,343
Silica ..	25,099	..	29	7,155	141	3,433	..	35,857
Silver ..	(b) 18,881	2,227	403,573	477	23,916	124,955	..	(c) 574,029
Silver-lead Ore, Concentrates, etc.	4,149,540	..	..	..	..	..	..	4,149,540
Tin and Tin Ore ..	417,210	19,173	150,454	..	4,634	297,919	6,627	866,017
Wolfram ..	11,655	1,059	63,296	6	115	58,397	43,734	178,262
Zinc and Concentrates ..	583,489	..	394,412	..	..	585,116	..	1,563,017
Unenumerated ..	(c) 153,089	2,150	(f) 37,642	6,478	3,012	(g) 72,850	24,554	299,775
Total ..	16,258,694	1,980,972	5,023,495	3,012,973	9,487,562	2,494,119	204,366	38,462,181

(a) For items excluded see letterpress below. (b) See letterpress preceding this table.  
 (c) Incomplete. (d) Not included with mineral production. (e) Includes zircon-rutile-ilmenite  
 £115,995, dolomite £26,687, scheelite £5,807. (f) Includes zircon-rutile-ilmenite £31,373.  
 (g) Includes scheelite £71,353. (h) Mica.

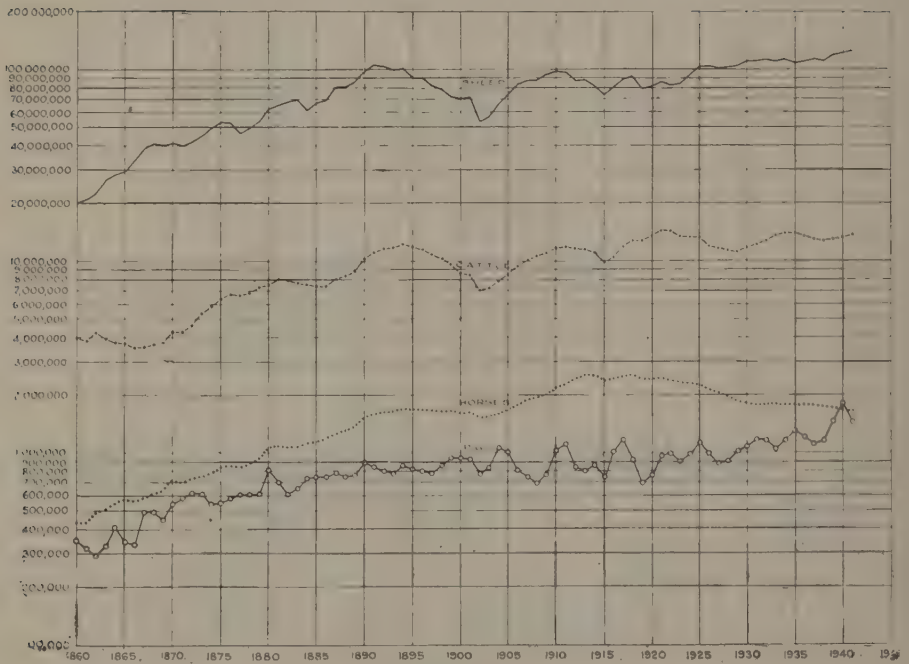


VALUE OF PRINCIPAL MINERALS PRODUCED - AUSTRALIA, 1850 TO 1940.



EXPLANATION.—The upper curve represents the total value of mineral production while the vertical distances between the curves represent the value of production of each mineral.

## LIVE STOCK—AUSTRALIA, 1860 TO 1941.



(See page 749.)

EXPLANATION.—This is a ratio graph, the vertical scale being logarithmic and the curves rise and fall according to the rate of increase or decrease. Actual numbers are indicated by the scale at the side of the graph.

It should be pointed out in connexion with the figures given in the foregoing table that the totals exclude certain commodities, such as stone for building and industrial uses, sand, gravel, brick and pottery clays, lime, cement and slates, which might be included under the generic term "mineral". Particulars of the production of some of these items are given in par. 6, Quarries, below. Items excluded, such as cement, carbide and sulphuric acid, are included in manufacturing production, and, in any case, only the raw material could properly be included in mineral production. The items excluded from the total for New South Wales in 1942 consisted of—lime, £50,078 building stone, £20,337; Portland cement, £1,011,599; coke, £2,181,623; road material and gravel, £713,040; shell grit, £20,988; sulphur and sulphuric acid, £118,751; and brick and pottery clays, £196,477. Carbide and cement, £395,114, have been excluded from the Tasmanian figures.

4. Value of Production, 1938 to 1942.—The values of the minerals produced in each State during the past five years are given in the table hereunder:—

## MINERAL PRODUCTION : VALUES.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Australia.
	£	£	£	£	£	£	£	£
1938 ..	10,731,391	1,881,015	3,966,119	2,932,473	10,844,469	1,889,804	214,724	32,462,995
1939 ..	12,123,751	2,248,169	4,556,962	3,320,181	12,288,532	2,056,741	244,478	36,838,814
1940 ..	12,791,408	2,596,117	5,105,629	3,218,237	13,230,552	2,749,817	311,024	40,002,784
1941 ..	15,073,833	2,371,568	5,300,600	3,187,093	12,399,351	2,650,271	274,172	41,250,888
1942 ..	16,258,694	1,980,972	5,023,495	3,012,973	9,487,562	2,494,119	204,366	38,162,181

The value of mineral production in Australia during 1942 showed a decided decrease from that for 1941 which was the highest ever recorded. Decreases were recorded in every State except New South Wales which increased by £1,185,000. The greatest decrease was in Western Australia, £2,912,000; followed by Victoria, £390,500; Queensland, £277,000; South Australia, £174,000; Tasmania, £156,000 and Northern Territory, £30,000.

There was a downward movement both in quantity and value for many minerals. The value of gold decreased by nearly £4 million, but was offset by an increase of more than £1.5 million in the value of black coal. The decrease of all mineral production was £2,795,000.

5. Total Production to end of 1942.—In the next table will be found the estimated value of the total mineral production in each State up to the end of 1942. The items excluded from the preceding table are also omitted here, and consequently the total for New South Wales is £58,600,000 less than that published by the State Department of Mines. The principal items excluded from the table below are coke, £28,571,000; cement, £29,096,000; lime, £2,273,000; and considerable values for marble, slate, granite, chert, gravels, etc., which the State Department now includes in the returns for quarries.

## MINERAL PRODUCTION : VALUES TO END OF 1942.

Mineral.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Australia.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
Gold ..	70,785	315,704	97,200	2,133	260,408	10,556	3,400	760,186
Silver and lead ..	158,100	275	15,099	422	2,515	11,711	67	188,189
Copper ..	16,525	217	29,808	33,331	1,816	27,071	246	109,014
Iron ..	7,757	16	519	31,883	37	97	..	40,309
Tin ..	18,023	1,203	12,993	..	1,670	20,076	685	54,650
Wolfram ..	379	13	1,257	..	2	651	616	2,918
Zinc ..	27,981	..	3,350	16	5	4,492	..	35,844
Coal ..	259,488	20,404	31,300	2	10,721	2,843	..	324,763
Other ..	10,534	1,166	3,127	8,155	1,341	3,203	229	27,755
Total ..	569,572	338,998	194,653	75,942	278,515	80,705	5,243	1,543,628



The "other" minerals in New South Wales include alunite, £221,000; antimony, £402,000; arsenic, £194,000; bismuth, £245,000; chrome, £140,000; diamonds, £149,000; magnesite, £574,000; molybdenite, £228,000; opal, £1,631,000; scheelite, £220,000; and shale oil, £2,091,000. In the Victorian returns antimony ore was responsible for £633,000. The value for coal in this State includes £5,380,000 for brown coal. Included in "other" in the Queensland production were opal, £188,000; gems, £640,000; bismuth, £145,000; cobalt, £158,000; molybdenite, £622,000; limestone flux, £898,000; and arsenic, £124,000. The chief items in South Australian "other" minerals were salt, £5,093,000; limestone flux, £396,000; gypsum, £1,604,000; phosphate, £163,000; and opal, £200,000. In Western Australia arsenic, £540,670; gypsum, £135,000; and asbestos, £122,000 were the principal items included with "other" minerals. In the Tasmanian returns osmiridium was responsible for £650,000, scheelite for £315,500, and limestone flux for £1,225,000.

6. Quarries.—Statistics giving details of the output of quarries were first published in Official Year Book No. 33, 1940. The details were collected following a resolution of the Conference of Australian Statisticians held in 1935.

For the purpose of these statistics the Conference defined a quarry as an establishment in which four hands or more are employed, or in which power other than hand-power is used. The details given in the following table represent the output of quarries conforming to this definition, although in a few relatively unimportant cases details of other establishments have been included.

The authorities responsible for the collection of these statistics are the Government Statistician in New South Wales, Victoria, Queensland and Western Australia, and the Department of Mines in South Australia and Tasmania.

It should be noted that the inclusion of returns from certain small establishments tends to inflate the figures in the following tables, but there is possibly a compensating factor in that some quantities used by shires and municipalities in the repair of roads have not been returned to the collecting authority. Complete details for all States for later years are not available.

### OUTPUT OF QUARRIES : AUSTRALIA, 1939.

Description.	N.S.W.	Victoria. (a)	Q'land. (a) (b)	S. Aust.	W. Aust. (a)	Tas.	Australia.
QUANTITY.							
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Building Stone ..	484,356	62,280	1,277	33,314	26,289	246	607,762
Macadam, Ballast, etc. ..	5,377,754	1,395,997	622,373	1,805,181	353,217	..	9,554,522
Limestone (c) ..	863,441	353,726	23,792	7,040	86,540	330,772	1,665,311
Clays ..	1,619,288	(d)	..	216,940	(e)	..	f 1,836,228
Other ..	116,215	..	..	..	(e)	..	(f) 116,215
Total ..	8,461,054	1,812,003	647,442	2,062,475	(f) 466,046	331,018	f 13,780,038
VALUE.							
	£	£	£	£	£	£	£
Building Stone ..	177,111	42,182	463	16,577	10,073	885	247,491
Macadam, Ballast, etc. ..	862,539	424,217	166,618	424,420	141,764	..	2,019,558
Limestone (c) ..	174,404	86,489	19,870	1,491	12,830	97,178	392,262
Clays ..	207,294	(d)	..	27,118	36,396	..	(f) 270,808
Other ..	25,579	..	..	..	13,012	..	38,591
Total ..	1,446,927	552,888	186,951	469,606	214,075	98,063	(f) 2,968,510

(a) Year ended June, 1940. (b) Estimated. (c) Limestone used as a flux and for the manufacture of lime and cement. It omits quantities used as building stone and as macadam, ballast, etc., which are already included under those headings. (d) Not collected. (e) Not available. (f) Incomplete.

In the following table corresponding details are given for each State for the years 1935 to 1939 :—

### OUTPUT OF QUARRIES : AUSTRALIA.

State.	1935.		1936.		1937.		1938.		1939.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	'000 tons.	£	'000 tons.	£	'000 tons.	£	'000 tons.	£	'000 tons.	£
New South Wales	6,142	1,052,989	7,260	1,261,301	8,616	1,662,135	9,402	1,654,887	8,401	1,446,927
Victoria (a) (b) ..	1,609	476,293	1,073	514,984	1,573	474,303	1,621	493,570	1,812	552,888
Queensland (a) (c) ..	902	168,030	934	255,040	776	242,603	729	213,318	647	186,951
South Aust. ....	1,005	170,273	1,154	196,957	1,244	226,606	1,765	339,064	2,063	469,606
Western Aust. (a) ..	164	68,201	272	94,975	367	137,672	500	185,237	(d) 4,661	214,075
Tasmania ..	254	68,357	262	71,243	309	80,986	288	89,655	331	98,063
Total ..	10,076	2,004,143	11,555	2,394,500	12,885	2,830,485	14,305	2,975,737	13,780	2,968,510

(a) Year ended June following.

(b) Omits clays.

(c) Estimated.

(d) Incomplete.

7. **Geophysical Methods for Detection of Ore Deposits.**—Reference to the application of geophysical survey methods in Australia will be found in Official Year Book No. 24, p. 570.

## § 2. Gold.

1. **Discovery in Various States.**—The discovery of gold in payable quantities was an epoch-making event in Australian history, for, as one writer aptly phrases it, this event "precipitated Australia into nationhood". A more or less detailed account of the finding of gold in the various States appears under this Section in Official Year Books Nos. 1 to 4.

2. **Production at Various Periods.**—In the following table will be found the values of the gold raised in the several States and in Australia as a whole during each of the nine decennial periods from 1851 to 1940, and in single years from 1933 to 1942. Owing to the defective information in the earlier years the figures fall considerably short of the actual totals, for during the first stages of mining development large quantities of gold were taken out of Australia by successful miners who preferred to keep the amount of their wealth secret.

### GOLD : VALUE OF PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Australia.
	£	£	£	£	£	£	£	£
1851-60..	11,530,583	93,337,052	14,565	..	..	788,564	..	105,670,764
1861-70..	13,676,103	65,106,264	2,076,494	..	..	12,174	..	80,871,035
1871-80..	8,576,654	40,625,188	10,733,048	579,068	..	700,048	79,022	61,293,038
1881-90..	4,306,541	28,413,792	13,843,081	246,668	178,473	1,514,921	713,345	49,216,821
1891-1900	10,332,120	29,004,152	23,989,359	219,931	22,308,524	2,338,336	906,988	89,999,410
1901-10..	9,569,492	30,136,686	23,412,395	310,080	75,540,415	2,566,170	473,871	142,009,109
1911-20..	4,988,377	13,354,217	9,876,677	238,808	46,808,351	873,302	(a) 100,652	76,240,384
1921-30..	940,946	2,721,309	1,976,715	47,564	20,462,957	193,833	(b) 11,545	26,354,869
1931-40..	5,115,397	9,444,570	9,118,903	459,330	74,391,204	1,164,492	786,790	100,480,686
1933 ..	226,068	448,228	710,168	49,619	4,915,950	51,579	5,058	6,406,670
1934 ..	307,662	597,040	982,636	58,582	5,534,491	48,139	15,941	7,544,491
1935 ..	439,140	768,401	904,755	64,109	5,677,328	73,143	81,457	8,008,333
1936 ..	525,792	1,018,670	1,048,748	66,593	7,326,309	152,291	65,683	10,204,086
1937 ..	595,855	1,266,507	1,104,760	60,372	8,688,921	176,130	100,462	11,993,007
1938 ..	780,958	1,273,351	1,334,788	46,922	10,286,349	195,079	109,168	14,026,615
1939 ..	848,985	1,533,899	1,428,598	33,895	11,796,085	192,596	163,414	16,002,472
1940 ..	1,068,692	1,924,396	1,351,654	34,892	12,607,219	204,248	238,849	17,519,950
1941 ..	941,244	1,600,016	1,164,621	17,908	11,852,452	212,710	201,599	15,990,550
1942 ..	807,436	1,060,910	994,214	13,930	8,865,806	191,835	126,035	12,060,166

Total—

1851-1942 70,784,803 315,704,156 97,200,072 2,133,287 200,408,182 10,556,385 3,399,847 760,186,822

(a) Period July, 1911 to June, 1920.

(b) Period July, 1920 to December, 1930.

The values quoted on this page are in Australian currency throughout.

Owing to the exhaustion of the more easily worked deposits and the unprofitableness of gold-mining during the era of high prices following the War of 1914-19, the production of gold in Australia declined from 3,838,029 fine oz. in 1903 to 427,159 fine oz. in 1929, the lowest output since the discovery of the precious metal.

Increased activity in prospecting due to prevailing economic conditions resulted in some improvement in 1930, but the marked development since that year received its impetus from the heavy depreciation of Australian currency in terms of gold. Oversea and local capital were attracted to the industry, and the employment of advanced geological methods and technical improvements brought many difficult or abandoned propositions into profit. The output of gold rose annually from 466,593 fine oz. in 1930 to 1,645,697 fine oz. in 1939, falling slightly to 1,644,000 fine oz. in 1940, but fell considerably in 1941 to 1,496,698 fine oz. and to 1,153,787 fine oz. in 1942.

Due mainly to the price of gold the value in 1940 reached the maximum figure of £17,519,950, exceeding the previous record of £16,294,684 reached in 1903.

Values per fine oz. in Australian currency assigned to the production of gold during recent years in the table above are £7 14s. 3½d. in 1933, £8 10s. 0¼d. in 1934, £8 15s. 1¼d. in 1935, £8 13s. 2d. in 1936, £8 13s. 8d. in 1937, £8 16s. 2½d. in 1938, £9 14s. 5½d. in 1939, £10 13s. 1¾d. in 1940, £10 13s. 8d. in 1941, and £10 9s. 0¾d. in 1942. Monthly fluctuations in the price of gold in London and in Australia are shown in Chapter XVII. "Public Finance".

The amount of gold raised in Australia in any one year attained its maximum in 1903, in which year Western Australia also reached its highest point. For the other States the years in which the greatest yields were obtained were as follows:—New South Wales, 1852; Victoria, 1856; Queensland, 1900; South Australia, 1894; and Tasmania, 1899.

The following table shows the quantities of gold raised in the various States and in Australia during each of the five years ended 1942. A separate line is added showing the total production in thousands of fine ounces from 1851 to 1942:—

#### GOLD : QUANTITY PRODUCED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Terr.	Australia.
	Fine oz.	Fine oz.	Fine oz.	Fine oz.	Fine oz.	Fine oz.	Fine oz.	Fine oz.
1938 ..	88,698	144,243	151,432	5,292	1,167,791	22,200	12,378	1,592,034
1939 ..	87,189	156,522	147,248	3,930	1,214,238	19,984	16,586	1,645,697
1940 ..	100,255	180,567	126,831	3,270	1,191,482	19,171	22,423	1,643,999
1941 ..	88,091	149,769	109,064	1,679	1,109,318	19,908	18,869	1,496,698
1942 ..	77,249	101,497	95,117	1,333	848,180	18,353	12,058	1,153,787
Total(a)— 1851-1942	15,735	72,652	21,359	441	48,737	2,278	651	161,853

(a) '000 omitted.

Preliminary returns of production for 1943 are given in the following table. The figures are subject to minor amendment.

#### GOLD PRODUCTION : AUSTRALIA, 1943.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Australia.
Quantity .. fine oz.	63,779	56,511	62,838	519	546,475	17,245	3,912	751,279
Value .. £ A'000	666	591	657	5	5,711	180	41	7,851

3. Changes in Relative Positions of States as Gold Producers.—The figures in the table showing the value of gold raised explain the enormous increase in the population of Victoria during the period 1851 to 1861, when an average of over 40,000 persons reached the State each year. With the exception of 1889, when its output was exceeded by



that of Queensland, Victoria maintained its position as the chief gold producer for a period of forty-seven years, until its production was surpassed by that of Western Australia in 1898. From that year onward the proportion contributed by Western Australia has increased and in 1942 represented 74 per cent. of the entire yield of Australia, the proportion contributed by this State over the period from 1851 to 1942 being 30 per cent. and by Victoria for the same period 45 per cent.

4. *Place of Australia in the World's Gold Production.*—The table given below shows the world's gold production, and the share of Australia therein in decennial periods since 1851 and during each of the last nine years for which returns are available. The figures given in the table have been compiled from the best authoritative sources of information.

### GOLD : WORLD'S PRODUCTION.

Period.				World's Production of Gold.	Gold Produced in Australia.	Percentage of Australia on Total.
				Fine oz.	Fine oz.	%
1851-60	..	..	..	61,352,295	24,877,013	40.55
1861-70	..	..	..	53,675,679	19,038,661	35.47
1871-80	..	..	..	50,473,314	14,429,599	28.59
1881-90	..	..	..	51,998,060	11,586,626	22.28
1891-1900	..	..	..	102,695,748	21,187,661	20.63
1901-10	..	..	..	182,891,525	33,434,069	18.28
1911-20	..	..	..	206,114,773	17,426,466	8.45
1921-30	..	..	..	186,091,278	5,841,902	3.14
1931	..	..	..	22,786,773	595,123	2.61
1932	..	..	..	24,204,275	713,882	2.95
1933	..	..	..	25,568,920	830,332	3.25
1934	..	..	..	27,032,084	887,490	3.28
1935	..	..	..	29,434,127	914,736	3.11
1936	..	..	..	33,167,494	1,178,581	3.55
1937	..	..	..	34,543,360	1,381,135	4.00
1938	..	..	..	37,110,594	1,592,034	4.29
1939	..	..	..	39,524,100	1,645,697	4.16

In 1939 the world's production of gold in fine oz. was 39,500,000, as compared with a return of 37,100,000 fine oz. in 1938. It is estimated that the world's production in 1940 approximated 40,500,000 fine oz. of which Australia's share amounted to 1,644,000 fine oz. or 4.1 per cent.

The quantities of gold produced in the principal producing countries in each of the five years 1935 to 1939 are given in the table hereunder. Particulars of the quantities and values of gold produced in all countries for the ten years 1930-39 will be found in *Production Bulletin No. 34, Part II.*, issued by this Bureau.

### GOLD PRODUCTION IN PRINCIPAL COUNTRIES.

Country.	1935.	1936.	1937.	1938.	1939.
	Fine oz.	Fine oz.	Fine oz.	Fine oz.	Fine oz.
Union of South Africa	10,773,991	11,336,214	11,734,575	12,161,392	12,821,507
Canada ..	3,284,890	3,748,028	4,096,213	4,725,117	5,094,379
U.S.S.R. (Russia) ..	4,500,000	5,500,000	5,000,000	5,000,000	5,000,000
U.S.A. ..	3,163,166	3,759,645	4,117,078	4,245,368	4,620,567
<b>Australia</b> ..	<b>914,786</b>	<b>1,178,581</b>	<b>1,381,135</b>	<b>1,592,034</b>	<b>1,645,697</b>
Philippine Islands ..	451,818	599,657	716,967	903,265	990,000
Korea ..	540,000	650,000	850,000	1,050,000	975,000
Mexico ..	682,319	753,950	846,381	923,798	944,000
Japan, including					
Formosa ..	674,030	820,666	832,000	852,000	910,000
Rhodesia ..	727,928	801,513	808,447	815,191	800,276

The next table shows the average yearly production in the principal gold-producing countries for the decennium 1930 to 1939 :—

**GOLD : AVERAGE ANNUAL PRODUCTION IN PRINCIPAL COUNTRIES,  
1930 TO 1939.**

Country.	Quantity.	Country.	Quantity.
	Fine oz.		Fine oz.
Union of South Africa ..	11,347,391	Mexico .. ..	732,725
U.S.S.R. (Russia) ..	3,663,862	Rhodesia .. ..	696,881
Canada .. ..	3,471,036	Japan, including Formosa	639,893
U.S.A. .. ..	3,145,750	Korea .. ..	521,992
Australia .. ..	1,020,723	Philippine Islands ..	488,921

5. **Employment in Gold-mining.**—The number of persons engaged in gold-mining in each State at various intervals since 1901 is shown in the following table. The figures include prospectors, etc, so far as they are ascertainable, and include those who may not have worked during the whole of the year.

**GOLD-MINING : PERSONS EMPLOYED.**

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Total.
	No.	No.	No.	No.	No.	No.	No.	No.
1901 ..	12,064	27,387	9,438	(a) 1,000	19,771	1,112	(a) 200	70,972
1903 (b) ..	11,247	25,208	9,229	(a) 1,000	20,716	973	(a) 200	68,573
1913 ..	3,570	11,931	3,123	800	13,445	481	175	33,525
1923 ..	1,141	2,982	603	32	5,555	119	30	10,462
1933 ..	6,913	6,126	4,161	231	9,900	229	95	27,655
1937 ..	3,885	6,180	3,436	192	16,174	179	388	30,434
1938 ..	3,764	6,315	3,378	158	15,374	141	267	29,397
1939 ..	3,441	6,169	3,299	178	15,216	116	421	28,840
1940 ..	2,952	4,783	1,995	157	14,593	123	347	24,950
1941 ..	2,330	2,801	1,630	86	13,106	80	236	20,269
1942 ..	1,571	1,661	1,075	34	8,123	33	(c)	d 12,497

(a) Estimated. (b) Year of maximum production for Australia. (c) Not available.  
(d) Excludes Northern Territory.

Owing to causes referred to earlier in this section, the number employed in gold-mining had dwindled to the comparatively small figure of 6,108 in 1929. Stimulated by the enhanced price of gold, employment in the industry rose more than five-fold to 33,113 in 1935, but since then the numbers employed have declined each year to 12,497 in 1942.

6. **Tax on Gold.**—(i) *General.* The Commonwealth Government imposed a tax on gold produced in Australia or in any Territory under its jurisdiction and delivered to the Commonwealth Bank on or after 15th September, 1939. The rate of tax was fixed at 50 per cent. of the price payable by the Bank in excess of £A9 per fine oz. Gold imported from places other than Australian Territories is not subject to the tax, nor is gold coin or wrought gold unless and until the Treasurer otherwise directs by notice in the *Commonwealth Gazette*.

The tax on gold yielded £1,214,621 during 1939-40; £1,452,260 during 1940-41; £1,030,425 in 1941-42; £524,694 in 1942-43; and £317,720 in 1943-44.

(ii) *Development of Gold Mining Industry.* Under the Gold Mining Encouragement Act 1940 a rebate of tax is allowed to bona fide prospectors in respect of the first 25 ounces delivered by them each year, and a refund of the whole or part of the tax is made

to certain producers on low margins. In such cases gold is not taxed if their profits do not exceed 30s. per fine oz. and they only pay tax, but not exceeding the ordinary tax payable, to the extent to which their profits exceed 30s. per fine oz.

Assistance amounting to £150,000 was given to the Gold Mining Industry, through the medium of the States, during 1940-41.

7. **Bounty on Production.**—A reference to the bounty provided by the Commonwealth on gold production in Australia appears in Official Year Book No. 32, p. 579.

### § 3. Platinum and Platinoid Metals.

1. **Platinum.**—(i) *New South Wales.* The deposits at present worked in the State are situated in the Fifield division, near Parkes and in the Ballina division. The production in 1942 from all divisions amounted to 2 oz. valued at £30, as compared with 22 oz. valued at £216 in the preceding year. The total production recorded to the end of 1942 amounted to 20,236 oz., valued at £128,917.

(ii) *Victoria.* In Gippsland the metal has been found in association with copper and 127 oz. were produced in 1913, but there has been no production in recent years.

(iii) *Queensland.* Platinum, associated with osmiridium, has been found in the beach sands between Southport and Currumbin, in creeks on the Russell gold-field near Innisfail, and in alluvial deposits on the Gympie gold-field, but no production has been recorded.

2. **Osmium, Iridium, etc.**—(i) *New South Wales.* Small quantities of osmium, iridium and rhodium are found in various localities. Platinum, associated with iridium and osmium, has been found in the washings from the Aberfoil River, about 15 miles from Oban; on the beach sands of the northern coast: in the gem sands at Bingara, Mudgee, Bathurst and other places. In some cases, as for example in the beach sands of Ballina, the osmiridium and other platinoid metals amount to as much as 40 per cent. of the platinum, or about 28 per cent. of the whole metallic content. There was no production of these metals during 1942.

(ii) *Victoria.* In Victoria, iridosmine has been found near Foster, and at Waratah Range, South Gippsland.

(iii) *Tasmania.* The yield of osmiridium was returned as 142 oz. in 1942 valued at £2,930 compared with the record production in 1925 of 3,305 oz. valued at £103,570. The decrease in later years was largely due to the decline in price from £31 in 1925 to £15 os. 4d. per oz. in 1938 (although the price rose to £24 10s. 1d. per oz. in 1940 and reached £20 12s. 8d. in 1942), but the depletion of the known alluvial deposits was also a factor.

### § 4. Silver, Lead and Zinc.

1. **Occurrence in Each State.**—Particulars regarding the occurrence of silver and associated metals in each State were given in Official Year Books, Nos. 1 to 5.

2. **Production.**—(i) *General.* The values of the production of silver, silver-lead ore and lead from the various States during each of the five years ended 1942 are given in the following table:—

SILVER AND LEAD : VALUE OF PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Australia.
	£	£	£	£	£	£	£	£
1938 ..	3,520,465	647	9-6,614	70	29,477	207,773	..	4,745,046
1939 ..	3,546,440	726	1,010,856	61	32,800	291,980	..	4,882,953
1940 ..	4,454,085	969	1,342,550	391	35,107	500,218	..	6,333,324
1941 ..	4,456,973	2,410	1,324,349	837	37,648	433,643	4	6,255,860
1942 ..	4,168,421	2,227	1,034,550	35,585	23,016	358,066	..	5,623,665



(ii) *New South Wales.* The figures quoted above for New South Wales for 1942 include silver to the value of £18,881 and silver-lead ore and concentrates valued at £4,149,540. Since the Sulphide Corporation Ltd. ceased smelting operations in 1922 the silver (metal) is obtained chiefly in the refining of gold and copper ores, and there has been no production of lead (pig) in the State. It may be noted here that the bulk of the carbonate and siliceous ore from the Broken Hill field is sent for treatment to Port Pirie in South Australia, while the remainder of the ore is concentrated on the field and then dispatched to Port Pirie for refining. The output of silver-lead ores and concentrates for 1942 showed a decrease of 23,218 tons over that of the previous year, and the value declined by more than £300,000.

It must be understood that the totals for New South Wales in the table above represent the net value of the product (excluding zinc) of the silver-lead mines of the State. In explanation of the values thus given, it may be noted that, as previously mentioned, the metallic contents of the larger portion of the output from the silver-lead mines in the State are extracted outside New South Wales, and the Mines Department considers, therefore, that the State should not take full credit for the finished product. The real importance of the State as a producer of silver, lead and zinc is thus to some extent understated. The next table, however, which indicates the quantities of metals extracted within Australia and the contents by assay of concentrates exported during selected years, will show the estimated total production and the value of the metal contents of all ore mined in New South Wales :—

### SILVER AND LEAD : PRODUCTION IN NEW SOUTH WALES.

Year.	Metal Extracted within Australia.				Contents of Concentrates Exported.			
	Silver.	Lead.	Zinc.	Value.	Silver.	Lead.	Zinc.	Value.
	Fine oz.	Ton.	Ton.	£	Fine oz.	Ton.	Ton.	£
1903 ..	6,489,689	92,293	286	1,790,929	1,736,512	29,706	14,625	308,714
1913 ..	5,908,638	106,432	4,121	2,709,867	8,596,251	117,903	184,149	3,759,691
1923 ..	7,233,236	124,570	41,153	5,707,739	4,834,718	40,906	149,319	1,813,287
1933 ..	7,430,479	158,475	53,956	3,579,886	790,792	18,344	63,849	475,161
1938 ..	8,497,637	181,187	47,370	4,438,188	1,060,913	15,213	66,359	479,795
1939 ..	8,910,129	198,776	44,965	4,811,208	674,620	17,636	109,346	650,809
1940 ..	8,266,353	187,705	49,398	6,490,611	311,329	10,111	74,888	538,259
1941 ..	9,192,833	212,665	55,094	7,553,248	164,001	7,775	62,971	451,525
1942 ..	8,640,871	205,630	55,473	7,327,881	464,450	17,144	68,387	753,664

\* Further details in regard to zinc are given in § 7 following.

The figures given above are quoted by the Mines Department of New South Wales. Accurate details in regard to gold, copper, antimony, cadmium and cobalt contained in the silver-lead ores are not available. Cadmium was first extracted in 1922 at Risdon, in Tasmania, and in 1942 the amount won from ores of New South Wales origin was given as 121.81 tons, valued at £53,750. As pointed out previously credit for the value is not taken in the New South Wales returns, the value accruing to the State being taken as that of the declared value of the concentrates at the time of their dispatch.

(a) *Broken Hill.* Broken Hill, in New South Wales, is the chief centre of silver production in Australia. A description of the silver-bearing area in this district is given in earlier issues of the Official Year Book. (See No. 4, p. 500.)

Although the returns are not complete in all cases, the following table relating to the companies controlling the principal mines at Broken Hill will give some idea of the richness of the field :—

## SILVER : BROKEN HILL RETURNS TO END OF 1939.

Mine.	Value of Output to end of 1939.	Dividends and Bonuses Paid to end of 1939.
	£	£A.
Broken Hill Proprietary Co. Ltd. .. ..	54,059,804	17,412,937
Broken Hill Proprietary Block 14 Co. Ltd. .. ..	4,750,508	670,160
British-Australian Broken Hill Co. Ltd. .. ..	5,858,998	821,280
Broken Hill Proprietary Block 10 Co. Ltd. .. ..	4,940,989	1,432,500
Sulphide Corporation Ltd. (Central and Junction Mines)	30,495,262	4,700,283
Broken Hill South Ltd. .. ..	29,192,159	7,855,000
North Broken Hill Ltd. .. ..	26,429,365	8,230,190
Broken Hill Junction Lead Mining Co. .. ..	1,185,058	87,500
Junction North Broken Hill Mine .. ..	3,511,940	171,431
The Zinc Corporation Ltd. .. ..	16,209,301	5,026,962
Barrier South Ltd. .. ..	151,517	50,000
<b>Total</b> .. ..	<b>176,790,901</b>	<b>46,518,243</b>

The returns relating to dividends and bonuses paid exclude £1,744,000, representing the nominal value of shares in Block 14, British, and Block 10 companies, allotted to shareholders or the Broken Hill Proprietary Company. If the output of the companies which were, prior to 1938, engaged in treating the tailings, etc., be taken into consideration, the totals for output and dividends shown in the table would be increased to about £184.1 million and £48.6 million respectively. The authorized capital of the various companies amounted to £18,918,000 in 1939, an increase of £7.5 million on that of 1936 due to the authorized capital of the Broken Hill Proprietary Co. being raised from £7.5 million to £15 million in 1937. In 1939 the dividends and bonuses paid amounted to £1,647,613 shared in by the companies controlling the principal mines as follows :—Zinc Corporation, £184,785 ; North Broken Hill, £280,000 ; Broken Hill South, £320,000 ; Broken Hill Proprietary, £832,828, and Sulphide Corporation, £30,000. The dividend of the latter company is quoted in sterling.

(b) *Other Areas.* Silver is found in various other localities in New South Wales, and production is increasing in importance. Development of the Captain's Flat silver-lead-zinc mine was continued during 1938, and production commenced during 1939. This mine employed 500 men in December, 1939. The initial capacity of the plant was 500 tons per day, increasing to 1,000 tons per day when a relatively small amount of additional equipment is installed. In addition to the production of silver-lead-zinc ores, it is expected that 80,000 tons of iron pyrites will be railed to Port Kembla annually where the sulphur contents will be used for the large-scale manufacture of sulphuric acid and superphosphate. During 1939, 134,794 tons of ore were mined, assaying 6.6 per cent. lead, 11.33 per cent. zinc, 0.72 per cent. copper, 1.34 dwts. gold and 1.33 oz. silver.

(iii) *Victoria.* The silver produced in 1942 amounted to 17,029 oz., valued at £2,227, and was obtained in the refining of gold at the Melbourne Mint.

(iv) *Queensland.* The production of silver in 1942 decreased by 81,079 oz. to about 3.1 million oz., and lead production by 9,761 tons to 33,512 tons, practically all of which was won from the mine and works at Mount Isa in the Cloncurry mineral field.

(v) *South Australia.* Silver ore has been discovered at Miltalie and Poonana, in the Franklin Harbour district, also at Mount Malvern and Olivaster, near Rapid Bay, and in the vicinity of Blinman and Farina, at Baratta, and elsewhere. There was no production

between 1932 and 1935 but subsequently there has been a small output of silver. In 1942 production amounted to 3,613 oz. valued at £477, and in 1943, 352 oz. valued at £49 were produced.

(vi) *Western Australia.* The quantity of silver obtained as a by-product and exported in 1942 was 188,421 fine oz., valued at £23,916.

(vii) *Tasmania.* The silver produced in 1942 amounted to 1,190,061 fine oz., valued at £124,955, and the lead to 9,360 tons, valued at £234,011, being produced in the Western Division of the State. This represents a considerable decrease below that of the previous year as regards quantities and values. About 1,154,000 oz. of the total silver output were contained in silver-lead, while 36,300 oz. were contained in the blister copper produced by the Mount Lyell Co.

(viii) *Northern Territory.* A rich deposit of silver-lead and copper ore was located in 1930 at the Jervois Range about 200 miles east of Alice Springs. Development is hindered, however, by transport difficulties and lack of permanent water. Rich sulphides have been found at Barrow Creek. Production during the past ten years has been very intermittent and not very great in the years when any output was recorded.

3. *Production of Silver in Australia.*—The following table sets out as fully as possible the total production of silver in Australia. It is based on the data published by the Australian Mines and Metals Association and shows the quantities of refined silver recovered by smelters and mints and the estimated metallic contents of ores and concentrates exported:—

#### SILVER : PRODUCTION IN AUSTRALIA.

Particulars.	1914.	1924.	1934.	1937.	1938.
	Fine oz.	Fine oz.	Fine oz.	Fine oz.	Fine oz.
Metal recovered by—					
Smelters .. ..	4,020,904	7,529,845	8,583,133	9,279,983	9,102,178
Mints .. ..	226,019	101,368	91,416	230,526	254,961
Metallic contents in ores and concentrates exported ..	8,901,212	2,242,170	2,579,082	4,267,571	4,538,402
Total Production ..	13,148,135	9,873,383	11,253,631	13,778,080	13,895,541

NOTE.—Figures for years later than 1938 are not available.

4. *World's Production.*—The world's production of silver during the last five years for which particulars are available is estimated to have been as follows:—

#### SILVER : WORLD'S PRODUCTION.

1935.	1936.	1937.	1938.	1939.
'000 fine oz.	'000 fine oz.	'000 fine oz.	'000 fine oz.	'000 fine oz.
223,000	249,000	276,000	267,000	258,900

The world's production of silver in millions of fine oz. during 1918, 1928 and 1938 amounted respectively to 203, 258 and 267, of which Australia contributed 10.4 million, 9.6 million and 13.9 million fine oz., or 5.1 per cent., 3.7 per cent. and 5.2 per cent. respectively. The production for Australia includes an estimate of the silver contents of the ores, bullion and concentrates exported.



The estimated yields of the principal silver-producing countries in 1939 were as follows:—

## SILVER PRODUCTION IN PRINCIPAL COUNTRIES, 1939.

Country.	Production.	Country.	Production.
	Fine oz. (‘000 omitted.)		Fine oz. (‘000 omitted.)
Mexico .. ..	75,869	Bolivia .. ..	7,240
United States of America ..	57,808	Burma .. ..	(a) 5,920
Canada .. ..	23,117	Argentina .. ..	3,930
Peru .. ..	18,200	Belgian Congo .. ..	2,850
<b>Australia</b> .. ..	(a) <b>13,896</b>	Yugoslavia .. ..	2,570
Japan .. ..	11,000	Newfoundland .. ..	1,415
U.S.S.R. (Russia) ..	7,000	Union of South Africa ..	1,183
Germany .. ..	7,000	Chile .. ..	1,174

(a) Year 1938.

5. Production of Lead in Australia.—For reasons already mentioned, difficulties arise when an attempt is made to show the production of lead by States. This is due to the fact that production is largely recorded in terms other than metal. As the chief sources of production are New South Wales, Queensland, and Tasmania, the aggregation of their outputs can be accepted as being representative of the production for Australia. This is shown in the following table:—

## LEAD : PRODUCTION IN AUSTRALIA.

Year.	New South Wales. (a)	Queensland. (a)	Tasmania.	Total.
	Tons.	Tons.	Tons.	Tons.
1938 .. ..	196,400	41,196	10,652	248,248
1939 .. ..	216,412	45,292	11,021	272,725
1940 .. ..	197,816	48,118	13,551	259,485
1941 .. ..	220,440	43,273	11,753	275,466
1942 .. ..	222,774	33,512	9,360	265,646

(a) Estimated lead contents of silver-lead ores.

The following table is compiled from details supplied by the Australian Mines and Metals Association, and are the latest available from that source:—

## LEAD : PRODUCTION IN AUSTRALIA.

Particulars.	1934.	1935.	1936.	1937.	1938.
	Tons.	Tons.	Tons.	Tons.	Tons.
Metal recovered in Australia	160,201	181,211	159,504	186,757	182,214
Metallic contents in ores and concentrates exported ..	57,682	48,000	52,534	53,279	57,376
<b>Total Production ..</b>	<b>217,883</b>	<b>229,211</b>	<b>212,038</b>	<b>240,036</b>	<b>239,590</b>

6. Prices of Silver, Lead and Zinc.—In view of the close association in Australia, particularly in New South Wales, of ores containing these metals, the average prices of each metal on the London Metal Exchange during the latest available five years have been incorporated in the table hereunder:—

PRICES OF SILVER, LEAD AND SPELTER.

Metal.	1936.	1937.	1938.	1939.	1940.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Silver (Standard) per oz.	0 1 8.06	0 1 8.07	0 1 9.06	0 1 10.02	0 1 10.28
Lead .. per ton	17 13 4	23 4 3	15 6 6	15 13 2	25 0 0
Spelter    "   "	15 0 9	22 5 9	14 1 7	14 13 3	25 15 0

\* (a) Maximum price as fixed by the British Ministry of Supply.

At the outbreak of war in September, 1939, the prices of lead and zinc were fixed in London by the Ministry of Supply at £Stg16 12s. 6d. and £Stg15 respectively. On 18th December, 1939, increases to £Stg25 and £Stg25 15s. respectively, were permitted. In Australia prices were fixed on 19th December, 1939, at £A20 17s. 8d. per ton for lead and £A20 2s. 6d. per ton for zinc, and increases to £A22 per ton for each metal were made in February, 1940. No further changes were recorded in either country up to November, 1941.

7. Employment in Silver, Lead and Zinc-mining.—The average number of persons employed in mining for these metals during each of the last five years is given below:—

SILVER, LEAD AND ZINC-MINING : PERSONS EMPLOYED.

Year.	N.S.W.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Terr.	Australia.
	No.	No.	No.	No.	No.	No.	No.
1938 ..	5,612	530	..	4	421	3	6,570
1939 ..	5,137	550	5	2	401	..	6,095
1940 ..	4,904	493	6	..	367	..	5,770
1941 ..	4,419	461	2	..	554	..	5,436
1942 ..	4,104	471	..	..	509	..	5,084

§ 5. Copper.

1. Production.—Copper is widely distributed throughout Australia, but the chief sources of production are now centred in Tasmania and Queensland. South Australia and New South Wales were once large producers of copper but the output has decreased considerably in those States during recent years. The quantity of copper raised in Australia has been dependent largely upon prices.

The values of the local production as reported and credited to the mineral industry for the years 1938 to 1942 are shown hereunder. Quantities for Australia as a whole as returned by the several State Mines Departments are appended on separate lines at the foot of the table:—

## COPPER : PRODUCTION.

State.	1938.	1939.	1940.	1941.	1942.
	£	£	£	£	£
New South Wales .. ..	87,905	105,407	103,701	117,490	277,376
Queensland .. ..	203,967	289,927	428,263	620,996	625,375
South Australia .. ..	15,333	6,612	21,083	41,390	31,715
Western Australia .. ..	1,275	1,373	873	154	738
Tasmania .. ..	580,238	668,561	717,464	721,985	730,675
Northern Territory .. ..	4,362	2,248	1,072	3,185	..
Australia .. ..	893,080	1,074,128	1,272,456	1,505,200	1,665,879
Ingot, Matte, etc. .. ..	Tons. 18,751	Tons. 21,408	Tons. 20,354	Tons. 21,787	Tons. 21,699
Ore and Concentrates .. ..	935				

2. Sources of Production.—(i) *New South Wales.* The production during 1942 amounted to 2,319 tons from copper matte and 825 tons from copper concentrates. All the copper was obtained at Port Kembla from the treatment of copper matte forwarded by the Broken Hill Associated Smelters Pty. Ltd. at Port Pirie. The concentrates were obtained from various centres in New South Wales. Since 1919 the production in New South Wales has rarely exceeded 1,000 tons, whilst previously it had ranged from 2,500 tons in 1915 to 10,600 tons in 1911.

(ii) *Queensland.* In 1942, the yield in this State amounted to 6,331 tons valued at £625,375. Although an improvement on the yields of recent years the output for 1942 was very much less than that of 1920 when nearly 16,000 tons valued at £1,552,000 were raised. The falling-off was due primarily to the low prices realized for copper. The returns from the chief producing areas in 1942 were as follows:—Cloncurry, 1,283 tons, £127,850; Herberton, 273 tons, £26,693; and Mount Morgan, 4,309 tons, £424,075.

(iii) *South Australia.* Deposits of copper are found over a large portion of South Australia and its total production easily exceeds that of any other State. Compared with the output of previous years the production of South Australia has decreased during recent times, and is now exceeded by that of Tasmania, Queensland and New South Wales. A short account of the discovery, etc., of some of the principal mining areas, such as Kapunda, Burra Burra, Wallaroo and Moonta, is given in earlier issues of the Official Year Book. The Moonta and Wallaroo copper field, which was opened in 1860, was worked continuously, and up to the close of 1931, £20,500,000 of copper was produced. Between 1933 and 1938, the field was worked on a co-operative basis known as the Moonta Mining Scheme, to which reference is made in previous issues of the Official Year Book. Owing to the exhaustion of the ore reserves the operations of the Scheme ceased in August, 1938. However, owing to the exploitation of new boreholes, the output has increased and the production of copper in the State in 1942 amounted to 392 tons, valued at £31,715.

(iv) *Western Australia.* During 1942, the quantity of copper reported was 47 tons valued at £738 compared with 6 tons for £154 in 1941.

(v) *Tasmania.* The quantity of copper produced in Tasmania during 1942 was 11,785 tons, valued at £730,675, the Mount Lyell Mining and Railway Co. Ltd. accounting for the whole of the production. This company treated 55,949 tons of ore and concentrates and produced blister copper, containing copper 11,256 tons, silver 36,299 oz., and gold 7,252 oz., the whole being valued at £41,137,930.



(vi) *Northern Territory.* Copper has been found at various places, but the development of these deposits is hindered by low prices and the difficulties of transport. For the eighteen months ended December, 1936, 204 tons of ore were raised, being the first production recorded since 1932-33. Production in 1939 amounted to 96 tons valued at £2,248; in 1940, 64 tons, £1,072; and in 1941, 300 tons, £3,185. No production was recorded in 1942.

3. *World's Production of Copper.*—The world's production of copper during the five years 1935 to 1939 was estimated as follows. The figures have been taken from the statistical summary prepared by the Imperial Institute or from other authoritative sources.

#### COPPER : WORLD'S PRODUCTION.

1935.	1936.	1937.	1938.	1939.
Tons.	Tons.	Tons.	Tons.	Tons.
1,470,000	1,700,000	2,300,000	2,020,000	2,160,000

The yields from the principal copper-producing countries in 1939 were as follows :—

#### COPPER : PRODUCTION IN PRINCIPAL COUNTRIES. 1939.

Country.	Production.	Country.	Production.
	Tons.		Tons.
United States of America ..	661,000	Mexico .. ..	49,000
Chile .. ..	339,000	Yugoslavia .. ..	42,000
Canada .. ..	281,000	Peru .. ..	35,000
Rhodesia .. ..	216,000	Cyprus .. ..	24,000
Belgian Congo .. ..	122,000	Germany .. ..	30,000
U.S.S.R. (Russia) .. ..	107,000	Spain .. ..	25,000
Japan .. ..	77,000	Australia .. ..	21,408

During 1938 the share of the United States of America in the world's copper production amounted to nearly one-fourth and in 1939 to 31 per cent. The Australian proportion in 1939 was less than 1 per cent.

4. *Prices.*—The marked fluctuation in the price of copper is shown in the following table of average prices quoted in London and New York. The New York figures are given on the authority of the "Statistical Abstract of the United States, 1942," and "Survey of Current Business".

#### COPPER PRICES : LONDON AND NEW YORK.

Year.	Average London Price per Ton Standard Copper.	Average New York Price per lb. Electrolytic Copper.
	£ s. d.	Cents.
1935 .. ..	31 18 1	8.65
1936 .. ..	38 9 7	9.47
1937 .. ..	54 10 7	13.17
1938 .. ..	40 15 0	10.00
1939 .. ..	43 16 4	10.97
1940 .. ..	62 0 0	11.30
1941 .. ..	62 0 0	11.80
1942 .. ..	62 0 0	11.78

At the outbreak of war in September, 1939, the price of copper in London was fixed at £Stg51 per ton. This was subsequently increased on 18th December, 1939, to £Stg62 per ton, at which price it still remained in May, 1942.

In Australia the price was fixed at £A63 17s. 6d. per ton on 19th December, 1939, and further increased to £A76 per ton on 16th February, 1940, and to £A78 10s. per ton on 7th February, 1941. On the latter date supplies of local and imported copper were pooled and sold to consumers at the increased price to offset the loss on copper imported at a higher figure. The price paid to local producers, however, remained at £A76 per ton. Increased mining costs made a further rise necessary and the price was raised on 5th May, 1941, to £A86 10s. from which an amount of £A1 10s. is set aside to provide a bonus of £A5 per ton on production from new sources or on increased supplies from existing sources. On 28th May, 1942, the price was raised to £105 per ton in an effort to increase Australian production and from this amount a bonus of £A5 per ton is provided for all output which is in excess of the normal.

5. **Employment in Copper-mining.**—The number of persons employed in copper-mining during each of the last five years was as follows :—

#### COPPER-MINING : PERSONS EMPLOYED.

Year.	N.S.W.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Australia.
	No.	No.	No.	No.	No.	No.	No.
1938 .. ..	13	213	67	4	1,015	5	1,317
1939 .. ..	5	224	36	4	1,017	5	1,291
1940 .. ..	9	222	43	2	997	5	1,280
1941 .. ..	20	271	44	2	924	5	1,266
1942 .. ..	79	419	52	5	1,595	(a)	(b)2,150

(a) Not available.

(b) Excludes Northern Territory.

In 1917 over 9,000 persons were engaged in copper-mining.

### § 6. Tin.

1. **Production.**—The values of the production of tin as reported to the Mines Departments in each of the States during the five years 1938 to 1942 are given in the following table. A separate line is appended showing the recorded tonnage for Australia during each of the specified years.

#### TIN : PRODUCTION.

State.	1938.	1939.	1940.	1941.	1942.
	£	£	£	£	£
New South Wales .. ..	286,768	306,138	373,435	443,123	417,210
Victoria .. ..	28,050	47,233	32,253	19,569	10,173
Queensland .. ..	141,547	200,652	223,626	204,232	150,454
Western Australia .. ..	7,421	3,871	5,174	1,874	4,034
Tasmania .. ..	244,037	282,798	307,127	328,340	297,919
Northern Territory .. ..	3,205	4,487	4,533	4,041	6,627
Total .. ..	711,628	905,179	1,006,148	1,001,179	896,017
	Tons.	Tons.	Tons.	Tons.	Tons.
Ingot, Matte, etc. .. ..	3,446	3,831	4,665	3,867	3,208
Concentrates .. ..	286	252			

2. **Sources of Production.**—(i) *New South Wales.* Production of tin in 1942 was stated at 1,175 tons of ingots, and 3.3 tons of concentrates were exported overseas. A large proportion of the output in this State is obtained in normal years by dredging, principally in the New England district, 178 tons of stream tin being won in 1942. The Kikoiria area was the principal contributor to the output in 1942, the yield from this district comprising 709 tons of concentrates. Amongst other areas, Tingha produced 441 tons and Torington 113 tons.

(ii) *Victoria.* The production of tin in this State is obtained chiefly by dredging in the Beechworth district and by mining in the Toora district in Gippsland. The production in 1942 amounted to 84 tons of concentrates valued at £19,173 compared with 90 tons valued at £19,663 in 1941.

(iii) *Queensland.* The chief producing districts in Queensland during 1942 were Herberton, 396 tons, valued at £73,528; Cooktown, 61 tons, £13,686; Stanthorpe, 145 tons, £33,810; Chillagoe, 48 tons, £9,602 and Kangaroo Hills, 65 tons, £13,137. The total production, 746 tons, £150,454, was a decrease of 339 tons and £73,778 on that for 1937. These figures may be compared with those recorded in the early years of this century when the production ranged between 2,000 and 5,000 tons per annum.

(iv) *Western Australia.* The quantity of tine reported in this State in 1942 amounted to 23 tons, valued at £4,634, and was obtained in the Pilbara and Greenbushes fields.

(v) *Tasmania.* For 1942, the output amounted to 1,148 tons of tin, valued at £297,919, a decrease of 108 tons and £30,421 over the return for the previous year. The production of tin in this State has substantially increased since 1934 when 953 tons were produced. The mines associated with the production of tin are well equipped and the prospects of greater activity are very favourable.

(vi) *Northern Territory.* The production for 1942 amounted to 32 tons of concentrates valued at £6,627, compared with 22 tons of concentrates valued at £4,041 produced during 1941.

3. **World's Production.**—The world's production of tin during each of the last five years was as follows :—

#### TIN : WORLD'S PRODUCTION.

1935.	1936.	1937.	1938.	1939.
Tons.	Tons.	Tons.	Tons.	Tons.
136,000	179,000	206,000	157,000	183,000

The production of tin reached its maximum in 1937 when 206,000 tons were recorded. The chief producing countries of the world are :—Malaya, Netherlands East Indies, Bolivia and Thailand. These countries produced about three-quarters of the total production in 1939. The agreement controlling the production and export of tin was extended to 1941. The parties to this agreement are those countries already mentioned together with Nigeria, Congo and Indo-China. Production in Australia was not affected.



The yields from the principal producing countries in 1939 were as follows :—

**TIN : PRODUCTION IN PRINCIPAL COUNTRIES, 1939.**

Country.	Production.	Country.	Production.
	Tons.		Tons.
Malaya .. .. .	55,950	Burma .. .. .	5,750
Netherlands East Indies ..	31,281	<b>Australia</b> .. .. .	(a) <b>3,732</b>
Bolivia .. .. .	27,215	Argentina .. .. .	2,481
Thailand .. .. .	16,998	United Kingdom ..	1,800
China .. .. .	10,859	Japan .. .. .	1,700
Nigeria .. .. .	10,855	Indo-China .. .. .	1,392
Belgian Congo .. ..	9,663	Portugal .. .. .	1,005

(a) Year 1938.

Australia's share of the world's tin production, estimated at 157,000 tons in 1938, would appear to be a little more than 2 per cent.

4. **Prices.**—The average prices of the metal in the London market for the years 1937 to 1942 were as follows :—

**TIN PRICES : LONDON.**

Year.	Average Price Per Ton.	Year.	Average Price Per Ton.
	£ s. d.		£ s. d.
1937 .. .. .	242 6 7	1940 .. .. .	256 12 3
1938 .. .. .	189 12 1	1941 .. .. .	261 8 0
1939 .. .. .	226 5 6	1942 .. .. .	259 10 0

The average price of tin rose to £242 per ton in 1937 compared with £118 in 1931. In 1938 the price receded to £189 per ton but rose to £261 per ton in 1941, falling slightly to £259 per ton in 1942.

Subsequent to the outbreak of war in September, 1939, the price of tin in London was controlled and fixed at £Stg230 per ton. In December, 1939, the price was unpegged and immediately rose to £Stg271. In Australia the domestic price was raised to £A306 per ton in February, 1940, and to £A320 per ton in April, 1941. It was increased to £A371 per ton in May, 1942, in order to stimulate production, and this price includes a margin of £10 per ton which will be pooled to stimulate development of less profitable areas.

5. **Employment in Tin-mining.**—The number of persons employed in tin-mining during the last five years was as follows :—

**TIN-MINING : PERSONS EMPLOYED.**

Year.	N.S.W.	Victoria. (a)	Q'land.	W. Aust.	Tas.	Nor. Terr.	Australia.
	No.	No.	No.	No.	No.	No.	No.
1938 .. .. .	1,440	5	1,263	73	1,123	15	3,919
1939 .. .. .	1,566	5	1,375	50	1,100	17	4,113
1940 .. .. .	1,686	5	1,037	39	1,094	40	3,901
1941 .. .. .	1,616	3	985	18	904	45	3,571
1942 .. .. .	1,243	3	589	15	801	(b)	(c) 2,653

(a) The tin produced in Victoria was raised by a dredging company operating primarily for gold.

(b) Not available.

(c) Includes two miners in South Australia, but excludes Northern Territory.

## § 7. Zinc.

1. *Production : States.*—(i) *New South Wales.* (a) *Values Assigned.* The production of zinciferous concentrates is confined chiefly to the Broken Hill district of New South Wales, where zincblende forms one of the chief constituents in the enormous deposits of sulphide ores. During the earlier years of mining activity on this field a considerable amount of zinc was left in tailings, but from 1909 onwards improved methods of treatment resulted in the profitable extraction of the zinc contents of the accumulations at the various mines.

As the metallic contents of the bulk of the concentrates, etc., produced in the Broken Hill district are extracted outside New South Wales, the mineral industry of that State is not credited by the Mines Department with the value of the finished product. During 1942 the zinc concentrates produced amounted to 273,368 tons, valued at £583,489. Portion of the zinc concentrates produced is treated at Risdon in Tasmania. The production from these concentrates in 1942 as recorded by the Electrolytic Zinc Company of Australia Ltd. at Risdon amounted to 55,473 tons of zinc, 121.81 tons of cadmium and 16.27 tons of cobalt oxide. This is referred to in the Tasmanian production below. The balance, which in 1942, amounted to 132,025 tons, was exported overseas.

The reopening in 1937 of the mine at Captain's Flat by the Lake George Mines Ltd. was an important development. Production commenced in 1939. Approximately 500 men are employed at the mine. In 1942 32,466 tons of zinc concentrates were produced assaying 54.62 per cent. zinc.

(b) *Local and Foreign Extraction.* A statement of the quantity of zinc extracted in Australia and the estimated zinc contents of concentrates exported overseas during the five years 1934 to 1938 will be found in § 17 hereinafter.

(ii) *Queensland.* The production of zinc in the Cloncurry district of Queensland during 1942 was 21,035 tons, valued at £394,412, compared with 27,437 tons valued at £514,437 in 1941 and 4,411 tons valued at £68,863, obtained in 1935. The metal was produced by the Mount Isa Mines Ltd. and is exported overseas as concentrates.

(iii) *South Australia.* Zinc is known to exist in various localities in South Australia, but there has been no production during recent years.

(iv) *Tasmania.* The production of zinc from Tasmanian ores was suspended from 1931 to 1935. Developmental work on the Mount Read-Rosebery district was continued during that period and production commenced in 1936. In 1937—the first full year's operations since the inception of milling at Rosebery—23,481 tons, valued at £525,824, were obtained. In 1942, 21,472 tons of zinc, valued at £585,116, were obtained from Tasmanian ores, as well as 41 tons of cadmium valued at £18,462 and 2.25 tons of cobalt oxide valued at £1,497.

In addition to the above, the Electrolytic Zinc Company at Risdon operated on raw materials obtained from Broken Hill in New South Wales. Production from this source during 1942 amounted to 55,473 tons of slab zinc, valued at £1,275,879, 121.81 tons of cadmium, valued at £53,750, and 16.25 tons of sheet cobalt oxide, valued at £7,484.

2. *Production : Australia.*—The details furnished above do not adequately convey the potentialities of Australia as a producer of zinc. This is due to the omission of the metallic contents of ores and concentrates exported overseas, which, in recent years, have been in excess of the amount of metal actually recovered in Australia. In the following table the estimated metallic contents of these exports have been combined with the quantities of metal extracted in Australia to show the total production of zinc from ores mined in Australia. The figures do not include the contents of other zinc-bearing concentrates, e.g., lead concentrates, unless payment has been made for the zinc actually contained in them.

## PRODUCTION OF ZINC : AUSTRALIA, 1942.

State of Extraction or Export.	Estimated Metallic Contents and Metal extracted from Ores and Concentrates the Produce of—			
	New South Wales.	Queensland.	Tasmania.	Total.
	Tons.	Tons.	Tons.	Tons.
New South Wales .. ..	(a) 69,313	..	..	(a) 69,313
Queensland .. ..	..	21,035	..	21,035
Tasmania .. ..	55,473	..	18,809	74,282
Total .. ..	124,786	21,035	18,809	164,630

(a) Metallic contents of 132,025 tons of concentrates exported overseas (estimated).

3. **World's Production.**—The world's production of zinc ore in terms of metal during the five years 1934 to 1938 was as follows :—

## ZINC : WORLD'S PRODUCTION.

1934.	1935.	1936.	1937.	1938.
Tons.	Tons.	Tons.	Tons.	Tons.
1,162,000	1,540,000	1,700,000	1,860,000	1,840,000

The yields from the principal producing countries in 1938 are given hereunder, the figures referring to slab zinc produced in the various countries, irrespective of the source of the ore :—

## ZINC : PRODUCTION IN PRINCIPAL COUNTRIES, 1938.

Country.	Production.	Country.	Production.
	Tons.		Tons.
United States of America ..	398,500	United Kingdom ..	55,000
Belgium .. ..	207,000	Japan .. ..	50,000
Germany .. ..	191,300	Norway .. ..	45,000
Canada .. ..	153,500	Mexico .. ..	33,100
Poland .. ..	106,400	Italy .. ..	36,900
Australia .. ..	72,736	Netherlands ..	24,900
U.S.S.R. (Russia) ..	70,000	Rhodesia .. ..	10,200
France .. ..	60,000	Czechoslovakia ..	8,700

The production of Australia quoted above represents the actual quantity of metal extracted in Australia and omits, therefore, the zinc contents of ores and concentrates exported. If this quantity was included, the total production would amount to 162,830 tons, or about 9 per cent. of the world's output.

4. **Prices and Employment.**—Information regarding prices of zinc and employment in zinc-mining will be found on page 718.



## § 8. Iron.

1. **General.**—Although iron ore is widely distributed throughout Australia, the only known ore bodies of large extent, high grade and easy access are those situated at Yampi Sound, Western Australia, and at Iron Knob, South Australia. Estimates of the reserves at these centres place the quantities available at approximately 100 million tons and 150 million tons respectively. Bearing in mind the expansion of the iron industry in Australia, and the limitations of these reserves, the Commonwealth Government prohibited the export of iron ore from 1st July, 1938. A survey of the iron ore resources of Australia undertaken by the Commonwealth Geologist was completed at the end of 1940.

2. **Production.**—(i) *New South Wales.* The production of pig-iron from ores mined in New South Wales amounted to 4,580 tons in 1935, valued at £18,320. No iron ores had been produced since 1935 until the year 1941 when 202,180 tons were mined producing 63,102 tons of pig-iron. In 1942 an increase to 375,297 tons of ore and 182,118 tons of pig-iron were recorded. For many years the chief source of supply has been South Australia.

Small quantities of iron oxide produced in New South Wales are used by the various gas-works for purifying gas, and also in the manufacture of paper, and for pigments. These supplies are drawn chiefly from the deposits in the Port Macquarie Division. During 1942 the iron oxide raised amounted to 2,274 tons, valued at £1,933. Ironstone flux amounting to 2,432 tons valued at £950 was raised in the Goulburn Division during 1933. This is the only production recorded since 1922.

(ii) *Queensland.* Extensive deposits of iron ore are known to exist in Queensland. Their location and size, however, preclude their exploitation in comparison with the more favourable deposits of South Australia. In 1942, 3,755 tons of ore were obtained and used as a flux at the Chillagoe State Smelters.

(iii) *South Australia.* The production from the deposits worked by the Broken Hill Pty. Co. Ltd., at Iron Knob and at Middlebank reached its maximum in 1939, when 2,571,759 tons of ore valued at £2,957,523 were raised, while the production of 122,052 tons valued at £2,440,360 for 1942, represents a decrease of 449,707 tons and £517,163 on the 1939 figures.

(iv) *Western Australia.* The development of the deposits at Yampi Sound was discontinued in 1938 as a result of the embargo on exports. However 150 tons of iron ore valued at £225 were reported in 1942 for the first time since 1938. Exploratory operations are continuing until the survey of the quantity and grade of ore is completed. The expenditure thus incurred is to be the responsibility of the Commonwealth Government.

(v) *Tasmania.* There was no production of ironstone in Tasmania during 1942. The production of iron pyrites which amounted to 34,449 tons, valued at £43,061 in 1942, is not included in the mineral returns, but is credited to the manufacturing industry, as it is a by-product from the flotation of copper ore at Mount Lyell. This product is exported to the mainland, where the sulphur contents have displaced imported sulphur in the manufacture of chemical fertilizers. The recovery has grown considerably since 1932, when the output amounted to 274 tons.

(vi) *Other States.* Reference to the iron ore deposits in the various States appears in preceding issues of the Official Year Book (see No. 22, p. 779).

3. **Iron and Steel Bounties.**—During 1942-43 the bounties paid under the Bounties Acts on articles manufactured from locally produced materials were as follows: Wire-netting, £421; traction engines, £850. Corresponding amounts paid during 1941-42 were £369 and £1,108 respectively.

4. **World's Production of Iron and Steel.**—(i) *General.* According to the *The Mineral Industry*, the production in the principal countries during the latest available three years are shown in the next table. The figures for 1939 are in many instances estimates and, particularly for belligerent countries, should be accepted with some reserve.

## PIG-IRON AND STEEL : WORLD'S PRODUCTION.

Country.	Pig-iron.			Steel Ingots and Castings.		
	1937.	1938.	1939.	1937.	1938.	1939.
	Thousands of Tons.			Thousands of Tons.		
U.S.A. .. ..	37,127	19,161	31,604	51,792	28,739	47,732
Germany .. ..	15,957	18,226	19,828	19,816	22,875	24,139
U.S.S.R. (Russia) ..	14,520	14,479	15,374	17,824	17,802	17,439
Great Britain .. ..	8,497	6,763	8,130	12,963	10,394	13,559
France .. ..	7,917	5,956	7,826	7,761	6,080	8,402
Japan .. ..	3,561	3,040	3,320	6,423	5,930	6,230
Belgium .. ..	3,843	2,426	3,019	3,777	2,249	3,061
Italy .. ..	790	850	950	2,087	2,285	2,339
Luxemburg .. ..	2,513	1,527	1,812	2,510	1,413	1,650
Canada .. ..	898	758	831	1,401	1,156	1,385
<b>Australia .. ..</b>	<b>664</b>	<b>1,072</b>	<b>1,250</b>	<b>805</b>	<b>1,154</b>	<b>1,250</b>
Czechoslovakia ..	1,675	1,215	900	2,315	1,733	1,230
Poland .. ..	724	952	810	1,450	1,522	1,201
Sweden .. ..	646	647	612	1,104	964	1,080
India .. ..	1,453	1,628	1,800	971	950	1,050
Hungary .. ..	362	345	350	706	650	739
Austria .. ..	389	(a)	(a)	650	(a)	(a)
Union of South Africa	272	271	304	332	341	345
<b>Total—All Countries</b>	<b>102,848</b>	<b>80,452</b>	<b>104,494</b>	<b>135,317</b>	<b>107,157</b>	<b>132,857</b>

(a) Included with Germany.

The figures for the world's production of iron and steel reached exceptionally low levels in 1932, namely, pig-iron, 39,275,000 tons; steel, 50,029,000 tons. From that year onwards all steel-producing nations recorded continuous increases in production, but in 1938 a marked decline was recorded. During 1939, however, the fear of war created greater demands for pig-iron and steel. The output of the former metal reached record proportions in Germany, Union of Soviet Socialist Republics, Italy and Japan, while new records in steel production were attained in Great Britain, Germany, Italy and Japan.

The principal producers in Australia are the Broken Hill Pty. Co. Ltd. and the Australian Iron and Steel Ltd., the former situated at Newcastle and the latter at Port Kembla in New South Wales. Additional plant has been authorized at both of these works in order to meet the increasing demand for steel in Australia while an extension of the industry to South Australia is in hand.

(ii) *Australia.* The production of steel and pig-iron in Australia, of which New South Wales is the main producing State, is shown for each of the years 1932-33 to 1941-42.

## PIG-IRON AND STEEL : AUSTRALIAN PRODUCTION.

Year ended 30th June—	Pig-iron.	Steel Ingots.	Steel Rails, Bars and Sections.	Year ended 30th June—	Pig-iron.	Steel Ingots.	Steel Rails, Bars and Sections.
	Tons.	Tons.	Tons.		Tons.	Tons.	Tons.
1933 ..	336,246	392,666	295,523	1938 ..	929,676	1,167,340	906,426
1934 ..	487,250	518,326	431,765	1939 ..	1,104,605	1,171,787	985,035
1935 ..	698,493	696,861	585,838	1940 ..	1,212,006	1,292,115	1,034,714
1936 ..	783,233	820,395	671,244	1941 ..	1,475,707	1,647,108	1,319,544
1937 ..	913,406	1,079,854	837,445	1942 ..	1,557,641	1,699,793	1,421,059

## § 9. Other Metallic Minerals.

1. **Wolfram and Scheelite.**—(i) *General.* Tungsten ores occur in several of the States, in the Northern Territory and on King Island in Bass Strait, the last-named being included with Tasmania. It is a minor metal of growing importance in both peace and war. On account of the low prices during recent years, mining activities were restricted and production intermittent. In 1942, however, following a recession in price after 1937, prices soared to the record level of £21 17s. 6d. per cwt., compared with £3 2s. 9d. per cwt. in 1932. As a result, production of wolfram and scheelite responded accordingly. The production during the five years 1938 to 1942 is shown in the following table:—

## WOLFRAM AND SCHEELITE : PRODUCTION, AUSTRALIA.

Particulars.		1938.	1939.	1940.	1941.	1942.
WOLFRAM.						
New South Wales	cwt.	1,877	1,653	880	1,175	760
	£	25,740	16,249	8,364	13,044	11,655
Victoria..	cwt.	..	..	..	5	42
	£	..	..	..	75	1,059
Queensland ..	cwt.	3,015	1,945	2,271	2,400	3,803
	£	30,779	17,590	20,345	22,627	63,296
Western Australia	cwt.	..	20	20	..	4
	£	..	60	211	..	115
Tasmania ..	cwt.	5,982	4,452	4,686	4,720	3,660
	£	63,348	44,356	42,319	42,536	58,397
Northern Territory	cwt.	8,694	6,444	5,800	6,142	3,016
	£	78,277	58,183	47,828	52,326	43,734
Total ..	cwt.	19,568	14,514	13,657	14,442	11,285
	£	198,144	136,438	119,067	130,608	117,262

## SCHEELITE.

New South Wales	cwt.	184	292	390	405	260
	£	2,472	3,388	4,603	4,413	5,807
Queensland ..	cwt.	13	25	11	14	28
	£	93	227	94	98	546
Western Australia	cwt.	..	80	145	6	1
	£	..	609	1,559	101	357
Tasmania ..	cwt.	611	3,414	5,510	4,940	4,300
	£	6,193	33,301	49,120	42,700	71,353
Total ..	cwt.	808	3,811	6,056	5,365	4,589
	£	8,758	37,525	55,376	47,312	78,063

(a) Includes South Australia, 31 lb., £6.

2. **Cadmium.**—Cadmium is extracted at Risdon in Tasmania as a by-product from ores mined at Broken Hill in New South Wales, and on the west coast of Tasmania. The particulars given in the following table refer to the production of metal and do not include the cadmium contents of zinc ores or concentrates exported overseas.



3. **Cobalt.**—The recovery of this metal as an oxide is obtained in the same way as cadmium. It is recovered from the treatment of silver, lead and zinc ores of Broken Hill and Tasmanian origin. The production together with that of cadmium is given for the years 1938 to 1942 in the following table :—

**PRODUCTION OF CADMIUM AND COBALT : AUSTRALIA.**

Year.	Cadmium.				Cobalt Oxide.			
	Extracted in Tasmania from Ores mined in				Extracted in Tasmania from Ores mined in			
	New South Wales.	Tasmania.	Total.		New South Wales.	Tasmania.	Total.	
	Cwt.	Cwt.	Cwt.	£	Cwt.	Cwt.	Cwt.	£
1938 .. ..	2,943	980	3,923	79,406	377	12	389	8,084
1939 .. ..	2,488	960	3,448	56,343	390	16	406	9,319
1940 .. ..	2,449	1,000	3,449	59,390	356	7	363	8,430
1941 .. ..	2,897	941	3,838	69,749	397	8	405	9,417
1942 .. ..	2,436	828	3,264	72,218	325	45	370	8,981

The figures given above do not include the metallic contents of cadmium and cobalt contained in the ores and concentrates exported overseas.

4. **Other.**—Detailed information in regard to occurrence and production of other metallic minerals in each of the States appears in Official Year Book No. 22, pp. 780-3 and preceding issues.

### § 10. Coal.

1. **Production in each State.**—An account of the discovery of coal in each State appears in preceding issues of the Official Year Book (see No. 3, pp. 515-6). The quantity and value of the production in each State and in Australia during 1913, 1924, 1931 and each of the years 1938 to 1942 are given in the following table :—

**BLACK COAL : PRODUCTION.**

Year.	N.S.W.	Victoria. (a)	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
QUANTITY.							
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1913 ..	10,414,165	593,912	1,037,944	..	313,818	55,043	12,414,882
1924 ..	11,618,216	518,315	1,123,117	..	421,864	75,988	13,757,500
1931 ..	6,432,382	571,342	841,308	..	432,400	123,828	8,401,260
1938 ..	9,570,930	307,258	1,113,426	..	604,792	83,753	11,680,159
1939 ..	11,195,832	364,895	1,317,488	..	557,535	99,392	13,535,142
1940 ..	9,550,098	267,694	1,285,328	..	539,427	83,136	11,725,683
1941 ..	11,765,698	326,441	1,454,024	..	556,574	109,714	14,212,451
1942 ..	12,236,219	312,854	1,637,148	1,650	581,176	134,442	14,903,489
VALUE. (b)							
	£	£	£	£	£	£	£
1913 ..	3,770,375	274,371	403,767	..	153,614	25,367	4,627,494
1924 ..	9,589,547	569,555	985,542	..	363,255	66,555	11,574,454
1931 ..	4,007,343	362,284	699,926	..	330,178	98,004	6,103,735
1938 ..	5,603,842	188,101	958,884	..	375,083	61,991	7,187,901
1939 ..	6,768,659	259,814	1,167,844	..	362,811	74,460	8,633,588
1940 ..	6,125,585	230,452	1,151,567	..	364,500	63,688	7,935,792
1941 ..	8,265,881	303,761	1,404,646	..	389,278	85,311	10,448,877
1942 ..	9,472,363	411,107	1,698,231	1,650	461,495	108,241	12,153,087

(a) Excludes brown coal, shown in next table.

(b) At the pit's mouth.

The figures for Victoria already quoted exclude brown coal, the quantities and values of which were as follows :—

### BROWN COAL : PRODUCTION IN VICTORIA.

Year.	Quantity.	Value. (a)	Year.	Quantity.	Value. (a)
	Tons.	£		Tons.	£
1913 .. ..	2,984	569	1939 .. ..	3,651,014	385,952
1924 .. ..	127,490	41,116	1940 .. ..	4,278,475	391,549
1931 .. ..	2,194,453	251,511	1941 .. ..	4,565,638	422,993
1938 .. ..	3,675,450	351,721	1942 .. ..	4,933,861	469,699

(a) Cost of Production.

2. Distribution and Production of Coal in each State.—(i) *New South Wales*.—The coal deposits of New South Wales constitute the most important and extensively worked in Australia. The principal fields are known as the Northern, Southern and Western, and are situated at Newcastle, Bulli and Lithgow respectively.

The coal from the various districts differs considerably in quality—that from the Northern district being especially suitable for gas-making, household purposes and steam, while the product of the Southern and Western is essentially a steaming coal. At the present time the Greta coal seams in the Northern division are being worked extensively between West Maitland and Cessnock, and this stretch of country, covering a distance of 15 miles, is now the most important coal-mining district in Australia.

The following table gives the yields in each of the three districts during the five years 1938 to 1942 :—

### COAL : PRODUCTION IN DISTRICTS OF NEW SOUTH WALES.

District.	1938.	1939.	1940.	1941.	1942.
	Tons.	Tons.	Tons.	Tons.	Tons.
Northern .. ..	6,294,213	7,365,981	6,324,504	7,891,123	8,300,356
Southern .. ..	1,831,408	2,160,717	1,784,418	2,242,490	2,303,071
Western .. ..	1,445,309	1,669,134	1,441,176	1,632,085	1,632,792
Total .. ..	9,570,930	11,195,832	9,550,098	11,765,698	12,236,219
Total Value (a) £ ..	5,603,842	6,768,659	6,125,585	8,265,881	9,472,363
Average value per ton (a) ..	11s. 8½d.	12s. 1d.	12s. 10d.	14s. 1d.	15s. 6d.

(a) At the pit's mouth.

The production of coal in New South Wales exceeded 10 million tons in each year from 1920 to 1927, reaching its maximum in 1924, when 11,618,000 tons were produced. The output fell to 6,400,000 tons in 1931, but it has steadily increased each year to 11,195,832 tons in 1939, but fell in 1940 to 9,550,098 tons, increasing to 11,765,698 tons in 1941 and to the record figure of 12,236,219 tons in 1942. Of the total quantity of coal won in New South Wales since the commencement of operations to the end of 1942, namely, 500 million tons, about 348 million tons or 68 per cent. was obtained in the Northern District, 101 million tons or 20 per cent. in the Southern District, and 61 million tons or 12 per cent. in the Western District.

(ii) *Victoria.* (a) *Black Coal.* The deposits of black coal in Victoria occur in three main areas in the southern portion of the State, namely, the Wannon, the Otway and South Gippsland, which total approximately 3,500 square miles. The workable seams are restricted to the South Gippsland area, where the thickness ranges from 2 feet 3 inches to 6 feet. The total quantity of black coal mined in Victoria to the end of 1942 amounted to 19,224,000 tons valued at £15,024,641.

The output of black coal in Victoria during the last five years was as follows :—

### BLACK COAL : PRODUCTION IN VICTORIA.

Year.			State Coal- mine.	Other Coal- mines.	Total Production.	Total Value. (a)	Average Value per ton. (a)
			Tons.	Tons.	Tons.	£	s. d.
1938	..	..	253,065	54,193	307,258	188,101	12 3
1939	..	..	312,452	52,443	364,895	259,814	12 10
1940	..	..	214,249	53,445	267,694	230,452	15 3
1941	..	..	276,119	50,322	326,441	303,761	17 2
1942	..	..	270,754	42,100	312,854	411,107	(b)

(a) At the pit's mouth.

(b) Not available.

(b) *Brown Coal.*—(i) *General.* Victoria is richly endowed, both in quantity and quality, with brown coal deposits. Some account of these deposits and of the operations of the State Electricity Commission in connexion therewith will be found in preceding Official Year Books (see No. 22, p. 785). The brown coal produced in Victoria in 1942 amounted to 4,933,861 tons, all but 4,313 tons being procured at the State open cut at Yallourn. During 1942–43, 4,978,415 tons of brown coal were produced by the State Electricity Commission, of which 3,344,238 tons went to the power station and 1,634,177 tons to the briquette factory.

(ii) *Production of Briquettes.* The briquetting plant started operations in November, 1924, and in 1926 the output was 95,477 tons which had increased to 180,905 tons in 1930 and to 414,959 in 1942–43. Two and a half tons of brown coal are required to make one ton of briquettes.

(iii) *Queensland.* The distribution of production during the five years 1938 to 1942 was as follows :—

### COAL : PRODUCTION IN QUEENSLAND.

District.			1938.	1939.	1940.	1941.	1942.
			Tons.	Tons.	Tons.	Tons.	Tons.
Ipswich	..	..	547,901	627,965	625,683	689,680	751,177
Bowen	..	..	224,778	246,713	212,412	297,554	347,381
Clermont	..	..	88,407	111,945	125,846	110,409	142,607
Maryborough	..	..	77,162	101,967	100,682	114,190	127,975
Darling Downs	..	..	76,571	88,819	92,692	97,214	112,230
Rockhampton	..	..	64,174	88,053	86,108	105,398	119,673
Chillagoe (Mount Mulligan)	..	..	19,192	27,911	21,336	20,418	17,544
Mount Morgan	..	..	13,698	23,861	20,569	19,161	18,561
Mackay	..	..	1,543	254	..	..	..
Total	..	..	1,113,426	1,317,488	1,285,328	1,454,024	1,637,148

The record production of 1,637,148 tons in 1942 with that of 1,454,024 tons in 1941 both exceeded the previous peak output of 1,369,000 tons recorded in 1929.

(iv) *South Australia.* A new field of sub-bituminous coal has been opened up at Leigh Creek, South Australia, from which production commenced in 1944. A small amount of 1,650 tons valued at £1,650 was recorded in 1942 as a result of preliminary boring activities.



(v) *Western Australia.* The production from the five collieries operating on the Collie field amounted in 1942 to 581,176 tons, an increase of 24,602 tons over the year 1941. The value of the production increased by £72,217 to £461,495. The number of men employed was 825 and the output per man was 704 tons, which was 11 tons less than in 1941. The total production of coal from the Collie coal-field to the end of 1942 amounted to 16,112,004 tons.

(vi) *Tasmania.* The production in 1942 amounted to 134,442 tons, being 24,728 tons greater than the total for 1941. About 94,265 tons were contributed in 1942 by the Cornwall Coal Company and 21,735 tons by the Jubilee Company, the two mines combined raising nearly 78,000 tons, or about 86 per cent. of the total output of the State.

(vii) *Australia's Coal Reserves.* The latest available estimate of the actual and probable coal reserves of Australia is shown in the Report of the Royal Commission on the Coal Industry 1929-1930, and is based upon that prepared by the Coal and Lignites Panel of the Power Survey Sectional Committee of the Standards Association of Australia. The following table shows the actual and probable coal reserves as determined by that Committee :—

#### ACTUAL AND PROBABLE COAL RESERVES OF AUSTRALIA.

" (Millions of Tons.)

State.	Black Coal.	Sub-bituminous and Brown Coal.
New South Wales .. .. .	13,929	..
Victoria .. .. .	40	37,000
Queensland .. .. .	2,238	67
South Australia .. .. .	..	57
Western Australia .. .. .	..	3,500
Tasmania .. .. .	244	..
Total .. .. .	16,451	40,624

New discoveries of shallow coal have been made in South Australia and as a result the sub-bituminous coal reserves of that State should be increased by some 10 million tons.

3. *Production in Various Countries.*—The total known coal production of the world in 1938 amounted to about 1,420 million tons, towards which Australia contributed about 15.4 million tons, or 1 per cent. The following tables show the production of the chief British and foreign countries during each of the four years ended 1938. Similar details for 1939 are not available :—

#### COAL : PRODUCTION IN BRITISH EMPIRE.

Year.	Great Britain.	British India.	Canada.	Australia.	New Zealand.	Union of S. Africa.
<b>BLACK COAL.</b>						
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1935 ..	222,249,000	23,017,000	9,193,000	10,888,000	825,000	13,360,000
1936 ..	228,448,000	22,611,000	10,146,000	11,370,000	859,000	14,607,000
1937 ..	240,409,000	25,036,000	10,840,000	12,074,000	970,000	15,246,000
1938 ..	227,015,000	28,343,000	9,623,000	11,680,000	978,000	16,027,000
<b>BROWN COAL, LIGNITE.</b>						
1935 ..	..	..	3,186,000	2,222,000	1,290,000	..
1936 ..	..	..	3,452,000	3,045,000	1,281,000	..
1937 ..	..	..	3,299,000	3,394,000	1,308,000	..
1938 ..	..	..	3,098,000	3,675,000	1,244,000	..

## COAL : PRODUCTION IN FOREIGN COUNTRIES.

Year.	Germany.	Austria.	Hungary.	Belgium.	France. (a)	Czecho- slovakia.	Yugoslavia.
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## BLACK COAL.

		Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1935	..	140,744,000	246,500	810,000	26,087,000	46,363,000	10,791,000
1936	..	155,783,000	240,500	814,000	27,427,000	44,512,000	12,040,000
1937	..	181,599,000	226,600	903,000	29,213,000	43,618,000	16,513,000
1938	..	183,238,000	222,000	(b)	29,106,000	45,763,000	13,300,000

Year.	Spain.	Poland.	Nether- lands.	U.S.S.R.	Japan.	China. (c)	U.S.A.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1935	..	6,905,000	28,091,945	11,690,000	93,736,000	34,354,000	12,000,000
1936	..	(d)	29,278,000	12,600,000	106,677,000	37,466,000	12,000,000
1937	..	(d)	35,646,000	14,095,000	120,643,000	(d)	(d)
1938	..	(d)	37,502,000	13,275,000	130,300,000	(d)	(d)

## BROWN COAL, LIGNITE.

Year.	Germany.	Austria.	Hungary.	Belgium.	France.	Czecho- slovakia.	Yugoslavia.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1935	..	145,028,000	2,924,000	6,612,000	..	885,000	14,977,000
1936	..	158,848,000	2,851,000	6,993,000	..	905,000	15,697,000
1937	..	182,106,000	3,191,000	7,928,000	..	1,000,000	17,613,000
1938	..	191,899,000	3,477,000	9,212,000	..	1,040,000	12,900,000

Year.	Spain.	Poland.	Nether- lands.	U.S.S.R.	Japan.	China.	U.S.A.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1935	..	299,000	18,000	85,000	13,602,000	(d)	..
1936	..	(d)	13,000	87,000	17,333,000	(d)	..
1937	..	(d)	19,000	141,000	(e)	(d)	..
1938	..	(d)	9,000	168,000	(e)	(d)	..

(a) Excluding Saar District, which produced 11,139,000 tons in 1934, and 1,673,000 tons from 1st January to 17th February, 1935. From this date production has been included with that of Germany.  
 (b) Included with brown coal. (c) Including about 300,000 tons of lignite yearly. (d) Not available. (e) Included with black coal.

World production dropped from 1,510 million tons in 1937 to 1,420 million tons in 1938, largely as the result of the decline of nearly 100 million tons in the United States of America. The production of the British Empire amounted to 304 million tons in 1938, a decrease of 11 million tons or 3.5 per cent. on that of 1937. The production of foreign countries also decreased by 80 million tons to 1,120 million tons, or by 6.6 per cent. in the same period.

4. **Exports.**—(i) *General.* The quantity of coal of Australian production (excluding bunker coal) exported to other countries in 1942-43 was 254,043 tons, valued at £296,533, being from New South Wales. The quantities and values of the oversea exports of Australian coal for the years specified are shown in the following table :—

**COAL : OVERSEA EXPORTS, AUSTRALIA.**

Year.			Year.				
Quantity.			Quantity.				
Tons.			Tons.				
Value.			Value.				
£			£				
1913	..	2,098,505	1,121,505	1939-40	..	264,649	251,055
1921-22	..	1,028,767	1,099,899	1940-41	..	330,103	331,532
1931-32	..	344,015	341,800	1941-42	..	241,004	259,093
1938-39	..	382,085	347,054	1942-43	..	254,043	296,533

Australian coal taken for bunker purposes during the same years was as follows :—

**COAL : BUNKER, AUSTRALIA.**

Year.		Quantity.	Value.	Year.		Quantity.	Value.
		Tons.	£			Tons.	£
1913	..	1,647,870	1,018,375	1939-40	..	437,806	492,155
1921-22	..	1,498,035	2,178,101	1940-41	..	330,032	391,866
1931-32	..	506,140	534,897	1941-42	..	347,291	509,069
1938-39	..	549,453	561,063	1942-43	..	293,764	461,203

(ii) *New South Wales.* In 1940, the quantities exported overseas and interstate amounted to 2,605,868 tons, of which 2,526,257 tons, valued at £2,197,024 were shipped from Newcastle. Interstate exports from Newcastle in 1942 amounted to 3,063,248 tons valued at £2,908,075. Oversea exports in 1942 totalled 554,985 tons, valued at £680,370, representing 279,167 tons of bunker coal, valued at £367,768 and 275,818 tons of cargo coal, valued at £312,602.

The distribution of the total output from New South Wales collieries during the five years 1936 to 1940 was as follows, the quantities shown for export include bunker coal :—

**COAL : DISTRIBUTION OF OUTPUT, NEW SOUTH WALES.**

Year.			Exports to Australian Ports.	Exports to Foreign Ports.	Local Consumption.	Total Production.
			Tons.	Tons.	Tons.	Tons.
1936	..	..	2,166,241	911,176	6,122,049	9,199,466
1937	..	..	2,407,978	922,515	6,721,026	10,051,519
1938	..	..	2,113,393	910,872	6,546,665	9,570,930
1939	..	..	2,634,310	873,084	7,688,438	11,195,832
1940	..	..	1,986,047	619,821	6,944,230	9,550,098
1941	..	..	(a)	(a)	(a)	11,765,698
1942	..	..	(a)	(a)	(a)	12,236,219

(a) Not available.

For the period of five years 1936 to 1940 shown in the table above, 23 per cent. of the total output was exported to other States, 8 per cent. was sent overseas, and 69 per cent. was consumed locally.

5. **Consumption in Australia.**—From the information now available it is possible to show particulars of the production of coal and its distribution in Australia.

Under normal circumstances the production and consumption of coal move in the same direction, but in times of industrial trouble large consumers may be compelled to rely upon accumulated stocks, and, consequently annual figures may move out



of alignment. For this reason the following table has been prepared on a quinquennial basis in order to smooth out any variations from the normal.

COAL : PRODUCTION AND UTILIZATION IN AUSTRALIA.

Particulars.	Average for Five Years ended—				
	1938-39.		1942-43.		
BLACK COAL.					
Source—					
Production of Saleable Coal (a)	..	Tons. 11,168,996	% 99.72	Tons. 13,173,250	% 99.82
Imports .. .. .	..	30,860	0.28	23,150	0.18
Total Supplies .. ..	..	11,199,856	..	13,196,400	..
Disposal—					
Exported overseas .. ..	..	345,606	3.09	294,377	2.23
Exported as bunker, overseas ..	..	592,469	5.29	391,669	2.97
Total .. .. .	..	938,075	8.38	686,046	5.20
Consumed as fuel in—					
Electric Light and Power Works	..	1,795,568	16.03	2,135,130	16.18
Factories (b) .. .. .	..	2,067,462	18.46	2,398,796	18.17
Railway Locomotives (c) .. ..	..	2,327,791	20.78	2,851,126	21.61
Total .. .. .	..	6,190,821	55.27	7,385,052	55.96
Consumed as raw material in—					
Gas Works .. .. .	..	1,110,801	9.92	1,221,566	9.25
Coke Works .. .. .	..	1,467,459	13.10	2,161,083	16.38
Total .. .. .	..	2,578,260	23.02	3,382,649	25.63
Balance available for consumption including accumulation of stocks (d) .. ..	..	1,492,700	13.33	1,742,653	13.21
Grand Total .. .. .	..	11,199,856	100.00	13,196,400	100.00

**BROWN COAL.**

Production of Brown Coal .. ..	Tons. 3,063,879		Tons. 4,350,877	
<b>Utilization—</b>				
As fuel in Electric Light and Power Works	1,673,018	54.60	2,734,385	62.85
Used in Briquette Works (e) .. ..	1,390,861	45.40	1,616,492	37.15
Total .. .. .	3,063,879	100.00	4,350,877	100.00

(a) Estimated. (b) Estimated where details were not available. Excludes brown coal, see Note (e). (c) Government Railways only. (d) Includes bunker coal for Interstate and Intra-state Shipping. (e) A portion of the briquette output is consumed in factories.

The production of coal is ascertained only in calendar years and to relate it to the other factors in the table, it was necessary to use estimates, which are probably accurate enough for the purpose.

6. Prices.—(i) *New South Wales*. The price of New South Wales coal depends on the district from which it is mined. Previously the Northern district coal generally realized a somewhat higher rate than the southern, but the average price in the Southern district is now in excess of that prevailing in the northern. According to the figures compiled by the State Statistician the average prices of saleable coal for the various districts and for the State as a whole during the last five years are given in the following table :—

#### COAL PRICES : NEW SOUTH WALES.

Year.			Northern District.	Southern District.	Western District.	Average for State.
			Per ton. s. d.	Per ton. s. d.	Per ton. s. d.	Per ton. s. d.
1938	..	..	11 11	14 0	9 6	12 0
1939	..	..	12 8	14 5	10 8	12 9
1940	..	..	13 6	15 0	11 6	13 6
1941	..	..	14 7	15 6	12 0	14 4
1942	..	..	15 11	17 9	14 3	16 0

(ii) *Victoria*. In Victoria, the average price of black coal per ton at the pit's mouth was in 1938, 12s. 3d.; in 1939, 12s. 10d.; in 1940, 15s. 3d.; in 1941, 17s. 2d. These averages exclude brown coal, which in 1942 cost 1s. 11d. per ton to produce.

(iii) *Queensland*. Prices in the principal coal-producing districts during the last five years were as follows :—

#### COAL PRICES : QUEENSLAND.

Value at Pit's Mouth.

District.	1938.	1939.	1940.	1941.	1942.
	Per ton. s. d.	Per ton. s. d.	Per ton. s. d.	Per ton. s. d.	Per ton. s. d.
Ipswich .. ..	17 0	17 2	17 5	18 11	20 5
Darling Downs .. ..	19 11	20 3	20 6	21 9	23 2
Wide Bay and Maryborough .. ..	24 0	24 3	25 0	26 0	27 11
Rockhampton .. ..	17 0	17 7	18 0	19 8	20 4
Clermont .. ..	13 8	13 11	13 7	14 7	16 4
Bowen .. ..	14 10	15 10	16 7	17 11	19 8
Chillagoe (Mount Mulligan) .. ..	31 6	31 1	29 10	33 3	33 10
Average for State ..	17 2	17 9	17 11	19 4	20 9

(iv) *South Australia*. The value of the 1942 production was £1 per ton.

(v) *Western Australia*. The average prices per ton of the Collie (Western Australia) coal during the last five years were: 1938, 12s. 5d.; 1939, 13s. 0d.; 1940, 13s. 6d.; 1941, 14s. 0d.; and 1942, 15s. 10½d.

(vi) *Tasmania*. The average prices per ton of coal at the pit's mouth in Tasmania for the last five years were: 1938, 14s. 10d.; 1939, 15s. 0d.; 1940, 15s. 4d.; 1941, 15s. 7d.; and 1942, 16s. 1d.

7. Prices in the United Kingdom.—During the five years 1934 to 1938 the average selling prices of coal per ton at the pit's mouth in the United Kingdom were: 1934, 12s. 11d.; 1935, 13s.; 1936, 14s. 0½d.; 1937, 15s. 2½d.; and 1938, 16s. 7½d. Later details are not available.

8. **Employment in Coal-mines.**—The number of persons employed in coal-mines, both above and below ground, in each of the producing States is given for selected years from 1913 and for each of the last five years :—

**COAL-MINES : PERSONS EMPLOYED.**

Year.	New South Wales.	Victoria.		Queensland.	Western Australia.	Tasmania.	Total.
		Black.	Brown.				
	No.	No.	No.	No.	No.	No.	No.
1913 ..	18,843	1,377	(a)	2,548	559	136	23,463
1923 ..	22,969	2,131	(a)	2,662	713	268	28,743
1933 ..	13,349	1,517	272	2,448	626	313	18,525
1938 ..	15,815	1,322	444	2,495	765	269	21,110
1939 ..	16,581	1,376	449	2,615	752	238	22,011
1940 ..	17,337	1,374	378	2,660	713	239	22,701
1941 ..	17,351	1,295	620	2,886	781	233	23,166
1942 ..	17,101	1,234	620	2,838	822	243	(b) 22,870

(a) Production prior to 1924 was of little importance.

(b) Including twelve miners in South Australia.

The maximum number was employed in 1926 when 31,774 persons were engaged in the coal-mines of Australia. Shortly after that year the industrial depression and a prolonged stoppage of work on one of the principal fields of New South Wales during 1929 and 1930 seriously affected the figures of employment. Since 1933 there has been a gradual improvement, but the numbers employed in 1942 were little more than two-thirds of the maximum figure already quoted. As the production in Australia in 1942 was 14,903,489 tons and exceeded the previous record output of 13.8 million tons in 1924, it is evident that the growth of mechanization in the industry has been a factor in raising production during recent years. In 1942 the quantity of coal cut by machinery in New South Wales amounted to 5,005,000 tons or 40.9 per cent. of the total output, compared with 21.4 per cent. in 1931 and 32.1 per cent. in 1939.

9. **Accidents in Coal-mining.**—(i) *Australia.* The following table gives the number of persons killed or injured, with the proportion per 1,000 employed, and in relation to the quantity of coal raised, this being a factor which must be reckoned with in any consideration of the degree of risk attending mining operations. Although no precise definition of an accident is available, any disablement from misadventure which rendered the injured unfit for work for fourteen or more days appears to have been uniformly adopted by the State Departments of Mines. A further table gives the rate of fatalities during the quinquennium 1938–1942.

**COAL-MINING : EMPLOYMENT AND ACCIDENTS, 1942.**

State.	Persons Employed in Coal-mining.	No. of Persons.		Proportion per 1,000 Employed.		Tons of Coal raised for each Person.	
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
New South Wales ..	17,101	23	75	1.34	4.38	532,010	163,150
Victoria (a) ..	1,854	..	7	..	3.78	..	(a) 749,531
Queensland ..	2,838	5	192	1.76	67.65	327,430	8,527
Western Australia ..	822	2	252	2.43	306.57	290,588	2,306
Tasmania ..	243	..	7	..	28.80	..	19,206
Total ..	22,858	30	533	1.31	23.32	661,245	37,218

(a) Includes brown coal.



The next table shows the average number employed in mining, number of fatalities, and rate per 1,000 employed during the quinquennium 1938-1942 :—

**COAL-MINING : FATALITIES, 1938 TO 1942.**

State.				Average No. of Coal-miners Employed.	Average No. of Fatal Accidents.	Rate per 1,000 Employed.
New South Wales ..	..	..	..	16,837	19.00	1.13
Victoria ..	..	..	..	1,822	1.40	0.77
Queensland ..	..	..	..	2,699	3.00	1.11
Western Australia ..	..	..	..	767	1.80	2.35
Tasmania ..	..	..	..	245	..	..
Total ..	..	..	..	22,370	25.20	1.13

(ii) *Other Countries.* According to the report of the Chief Inspector of Mines, the average death rate per 1,000 miners from accidents in coal-mines in Great Britain during the quinquennium 1933-37 was 1.11, the rates varying between 1.35 in 1934 and 1.02 in 1936 while the rate for Australia for the same period was 1.14. Details are not available for a later comparison.

## § 11. Coke.

1. *General.*—Notwithstanding the large deposits of excellent coal in Australia, the production of coke was limited to about 250,000 tons prior to the War of 1914-19. This was below local requirements and necessitated a fairly considerable import from abroad. During recent years, however, a high standard has been attained in the local product, imports have almost ceased, and Australian coke is being shipped to New Zealand and other islands in the Pacific. In 1942-43 the quantity exported was 29,944 tons, valued at £64,141 of which 26,363 tons, valued at £55,018, were sent to New Caledonia.

2. *New South Wales.*—The following table gives the production in New South Wales during the five years 1938 to 1942 as recorded by the Department of Mines :—

**COKE : PRODUCTION IN NEW SOUTH WALES.**

Items.			1938.	1939.	1940.	1941.	1942.
Quantity ..	tons		1,135,446	1,349,160	1,272,067	1,711,396	1,618,913
Value, total ..	£		1,100,266	1,185,579	1,078,411	2,134,022	2,181,623
Value, per ton ..		..	19s. 5d.	17s. 7d.	16s. 11d.	£1 4s. 11d.	£1 6s. 11d.

The figures quoted refer to the product of coke ovens, and exclude coke produced in the ordinary way at gas-works. The output fell to 217,509 tons in 1931, but with the general recovery of trade, the figure rose to a new high level of 1,711,000 tons in 1941, falling slightly to 1,618,913 tons in 1942. During the latter year the number of coke ovens at work totalled 546, and the number of persons engaged in its manufacture was 1,077.

3. *Queensland.*—A small quantity of coke is made in Queensland, the quantity returned in 1938 being 30,984 tons, of which 27,328 tons were produced at the Bowen State Coke Works. The greater proportion of the output of these works was consigned to the Mount Isa Mines Ltd. and to the Chillagoe State smelters. Hitherto the coke used at these ore-treatment works was imported from New South Wales, but now the local output is sufficient to meet the requirements of the State and leave a small surplus

available for export. The following table shows the amount manufactured at the State Coke Works during the five years 1938 to 1942 :—

### COKE : PRODUCTION IN STATE COKE WORKS—QUEENSLAND.

Year.			1938.	1939.	1940.	1941.	1942.
Quantity	..	tons	30,984	26,032	19,897	25,213	19,448

In order to avoid duplication with coal values, the returns for coke have not been included in the general tables of mineral production in the early part of this chapter.

## § 12. Shale-oil and Mineral Oil.

1. *Shale-oil.*—(i) *General.* Reference to the deposits of shale and the search for mineral oil in Australia will be found in Official Year Book No. 22, pp. 791-3.

(ii) *New South Wales.* Reference to the establishment of the shale-oil industry in Australia will be found in previous issues of the Official Year Book. In 1937 negotiations were completed between the Commonwealth and New South Wales Governments and the National Oil Proprietary Ltd., by which the latter company undertook to develop the shale-oil industry in the Newnes-Capertee district. The Commonwealth Government agreed to protect the industry by exempting from excise, up to 10 million gallons annually, the Company's output of petrol for a period of 25 years. The successful establishment of this plant will probably lead to an expansion of the industry in Australia and should provide a valuable training ground for technicians. Production commenced in 1940, and the following table shows the production of shale oil during 1940 to 1942 :—

### SHALE OIL : PRODUCTION IN NEW SOUTH WALES.

Year.		Northern District.		Southern District.		Western District.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		Tons.	£	Tons.	£	Tons.	£	Tons.	£
1940	..	..	..	..	..	43,805	43,805	43,805	43,805
1941	..	..	..	820	540	122,758	96,131	123,578	96,671
1942	..	828	1,881	1,559	1,898	114,937	138,564	117,324	142,343

(iii) *Tasmania.* About 38,000 gallons of crude oil were produced in 1934 from shale treated in Tasmania, while the total quantity of oil distilled from shale up to the end of 1934 was set down at 357,000 gallons. The plant owned by the Tasmanite Shale Oil Company has not operated since the end of January, 1935.

Investigations into the shale-oil deposits of the Mersey Valley are being continued but the establishment of the industry has been handicapped by the low-grade nature of the shale.

2. *Coal Oil.*—Attention has been directed to the production of oil from coal by a number of processes. A committee consisting of nominees of the Commonwealth and State Governments, excepting Western Australia, and of Imperial Chemical Industries Ltd., was appointed to advise on specific questions submitted to it. In a report submitted in June, 1937, it was stated that the stage had not been reached when Australia could

establish plants for the production of oil from coal. The committee recommended, however, that close touch be kept with developments abroad. A report dated 25th July, 1939, on the production of oil from coal was submitted to the Minister by the Standing Committee on Liquid Fuels. The recommendations of this Committee followed the lines of those of its predecessors.

3. *Natural Oil.*—(i) *Australia.* Natural oil has been proved to exist in Queensland, Victoria and Western Australia, the best indications being found in Victoria and Queensland. Many of the conditions favourable to the accumulation of oil in commercial quantities have been shown to be present in Queensland, Western Australia and New South Wales. In the latter State, however, no strong positive evidence of its existence has been recorded. Oil has been proved to occur in noteworthy quantities at Lakes Entrance, Victoria, but it still remains to be demonstrated whether the area can be developed on a commercial basis.

Reference is made in § 16 below to the assistance afforded by the Commonwealth Government in the search for petroleum oil.

(ii) *Victoria.* There was no production of crude petroleum oil in 1942. The total production to the end of that year amounted to 115,283 gallons, valued at £2,769. In conjunction with the State Government, the Commonwealth Government is carrying out a scout-drilling campaign in the Gippsland area.

(iii) *Queensland.* Great hopes are still entertained in regard to the petroliferous area in Queensland. Gas and light to medium gravity oils have been found at Roma, and gas and oily wax at Longreach. Structural conditions favourable to accumulation on a commercial scale have been located at several places between Injune and Springsure. The search for oil was continued during 1939 by several companies in localities situated at Mount Bassett, near Roma, at Hutton Creek and at Arcadia. Test bores have been drilled to bed rock in all the localities mentioned, the deepest being that at Arcadia which exceeded 6,000 feet. Showings of petroliferous gas, amounting at Arcadia to 3,000,000 cubic feet a day, and of petroleum have been encountered in all these bore-holes.

(iv) *South Australia.* Under prescribed conditions, the South Australian Government offers a bonus of £5,000 to the person or body corporate which first obtains from a local bore or well 100,000 gallons of crude petroleum containing not less than 90 per cent. of products obtainable by distillation.

(v) *Western Australia.* Only one company was active in Western Australia during 1939. The company, financially assisted by the Commonwealth and State Governments, commenced deep-drilling operations in the Kimberley district in 1939. No production has been recorded up to the end of 1942.

(vi) *General.* During 1939 efforts were made to secure greater uniformity in State legislation governing the search for oil. A draft Bill based on modern legislation in other countries was prepared by the Commonwealth and submitted to the State Governments. As a result amending legislation was passed in Victoria, Queensland, South Australia and Western Australia. There was immediate response to this in Queensland, where an agreement has been reached between the State Government and one of the major oil companies, whereby the company has undertaken to spend up to £400,000 in the search for oil in that State.

### § 13. Other Non-metallic Minerals.

A more or less detailed statement regarding the occurrence and production of other non-metallic minerals is given in preceding issues of the Official Year Book (see No. 22, pp. 793-6). The tables of quantities and values in § 1 of this Chapter will show the production of the principal items in this class for each State during 1942.



## § 14. Gems and Gemstones.

1. **Diamonds.**—It is difficult to secure accurate returns in connexion with the production of precious stones, but the yield of diamonds in 1942 in New South Wales was estimated at 183 carats, valued at £337. These were won by fossickers in the Inverell district. The total production to the end of 1942 is given at 206,129 carats, valued at £149,000.

2. **Sapphires.**—The production of sapphires in New South Wales during 1929 was returned as 65 oz., valued at £450, obtained wholly at Sapphire in the Inverell district, and the only output recorded since that year was 1,200 oz. valued at £600 in 1941. Production during recent years has been restricted owing to the unfavourable market.

In Queensland, gems to the value of £1,612 were purchased on the Anakie sapphire fields in 1942. It is probable that many were sold privately or held for better prices. For these reasons the returns are considered to be very incomplete. There were about 120 miners operating on the fields during 1934 but their number decreased to 20 in 1939. Production has declined very considerably since 1920, when the yield was valued at £66,000.

3. **Precious Opal.**—The estimated value of the opal won in New South Wales during 1942 was £800. This is not regarded as the total output of the State, however, because in many instances miners, buyers and collectors leave the fields before a record of their production or purchases can be secured. Some very fine stones are at times obtained, one weighing 5 ozs. and valued at £300 being found in 1911. Three finds of large stone were made in 1928, the gems weighing 790, 590 and 232 carats respectively and showing fine fire and lustre. Occasionally black opals of very fine quality are found, one specimen from the Wallangulla field, weighing 6½ carats, being sold in 1910 for £102, while in the early part of 1920 a specimen realized £600. It is stated that this locality is the only place in the world where the "black" variety of the gem has been found. The total value of opal won in New South Wales since 1890 is estimated at £1,630,668, but, as pointed out above, the figures are to some extent understated.

In Victoria small quantities of precious opal are found in the Beechworth district.

The opaliferous district in Queensland stretches over a considerable area of the western interior of the State, from Kynuna and Opalton as far south as Cunnamulla. The yield in 1939 was estimated at £50, and up to the end of that year at about £188,000. No production has been recorded since 1939. These figures are, however, merely approximations, as large quantities of opal, of which no record is obtained, are disposed of privately. Production during recent years has been limited by the paucity of demand. Only seven men operated during 1939. The greatest recorded output was for the year 1895 when the yield was valued at £32,750.

Owing to the poor market for gems, production from the Coober Pedy opal field, situated in the Stuart Range in South Australia, fell from £11,056 in 1929 to £1,517 in 1934. The production rose in 1937 to £11,887, but declined to £6,020 in 1939, and rose again to £11,568 in 1941. After a further drop in 1942, production in 1943 was valued at £13,881. The field is extremely prolific, a large quantity of precious white opal having been raised therefrom, and only a small portion of the known opal-bearing area has been thoroughly tested. The greatest yield for the State in any one year was obtained in 1920 when the value of production was returned at £24,000.

4. **Other Gems.**—Various other gems and precious stones have from time to time been discovered in the different States, the list including agates, amethysts, beryls, chialstolite, emeralds, garnets, moonstones, olivines, rubies, topazes, tourmalines, turquoises and zircons. In Western Australia, 600 carats (rough) of emeralds, valued at £278, were produced during 1929 in the Cue district on the Murchison gold-field. The value of the 3,750 carats reported from the same area in 1930 was not ascertainable as there were no sales during the year. There has been no recorded production since 1930.

During the three years 1939, 1940 and 1941, 10 tons of beryl were produced in Western Australia, valued at £83. Beryl is required chiefly for special alloys with copper which are used in the manufacture of castings, non-sparking tools and special diamond-drill bits.

### § 15. Number Engaged, Wages Paid and Accidents in Mining.

1. Total Employment in Mining.—The number of persons engaged in the mining industry in Australia fluctuates according to the season, the price of industrial metals, the state of the labour markets, and according to the permanence of new finds and the development of the established mines. During 1942, the number so engaged was as follows:—

#### NUMBER OF PERSONS ENGAGED IN MINING, 1942.

State.	Number of Persons engaged in Mining for—						Total.
	Gold.	Silver, Lead and Zinc.	Copper.	Tin.	Coal.	Other.	
New South Wales ..	1,571	4,104	79	1,243	17,101	1,978	26,076
Victoria ..	1,661	..	..	3	1,854	137	3,655
Queensland ..	1,075	471	419	589	2,838	388	5,780
South Australia ..	34	..	52	2	12	832	932
Western Australia ..	8,123	..	5	15	822	135	9,100
Tasmania ..	33	509	1,595	801	243	216	3,397
Northern Territory (a) ..	236	..	5	45	..	138	424
Australia ..	12,733	5,084	2,155	2,698	22,870	3,824	49,364

(a) Year 1941.

Included in the figures for "other" in South Australia were 223 engaged in mining iron ore, 47 gypsum miners, 229 salt gatherers, and 32 opal miners. The Tasmanian figures include 61 scheelite miners and 31 osmiridium miners.

The following table shows, at intervals since 1911, the number of persons engaged in mining in each State and the proportion so engaged of the total population:—

#### NUMBER ENGAGED IN MINING PER 100,000 OF POPULATION.

State.	1911.		1921.		1931.	
	Miners engaged.	No. per 100,000 of Population.	Miners engaged.	No. per 100,000 of Population.	Miners engaged.	No. per 100,000 of Population.
New South Wales ..	37,017	2,225	29,701	1,410	30,682	1,200
Victoria ..	15,986	1,210	5,211	339	6,463	359
Queensland ..	13,201	2,147	5,847	766	6,753	730
South Australia ..	6,000	1,457	2,020	406	518	90
Western Australia ..	16,596	5,787	7,084	2,122	7,147	1,653
Tasmania ..	5,247	2,760	3,170	1,486	3,397	1,512
Northern Territory ..	715	21,595	131	3,356	145	2,918
Australia ..	94,762	2,109	53,164	974	55,105	844

NUMBER ENGAGED IN MINING PER 100,000 OF POPULATION—*continued.*

State.	1940.		1941.		1942.	
	Miners engaged.	No. per 100,000 of Population.	Miners engaged.	No. per 100,000 of Population.	Miners engaged.	No. per 100,000 of Population.
New South Wales ..	28,089	1,013	27,554	987	26,076	925
Victoria ..	6,606	347	4,839	250	3,655	186
Queensland ..	6,781	661	6,541	631	5,780	557
South Australia ..	1,055	176	928	154	932	153
Western Australia ..	15,499	3,291	14,021	2,959	9,100	1,901
Tasmania ..	3,203	1,332	2,974	1,248	3,397	1,411
Northern Territory ..	637	10,184	424	6,756	(a)	(a)
Australia ..	61,870	880	57,281	807	48,940	(b) 682

(a) Not available.

(b) Excludes Northern Territory.

The general falling-off since 1911 is largely due to the causes mentioned in each section above. The proportion to population shows increases between 1931 and 1939 in all States, excepting New South Wales and Tasmania, and was attributable mainly to the larger number engaged in the search for gold. Between those years the increase in the number so engaged was approximately 5,000 persons. The number engaged in mining for tin increased by 1,900, while increases of 2,600 were also recorded in the mining for silver, lead and zinc. The number of copper-miners decreased by 500 over the same period. Since 1939 the number engaged in mining, and the proportion to population have decreased in most States, due mainly to heavy war-time demands upon man-power.

2. *Wages Paid in Mining.*—Information regarding rates of wages paid in the mining industry, which in earlier issues of the Official Year Book was given in this chapter, is now shown in the *Labour Report* issued by this Bureau.

3. *Accidents in Mining, 1942.*—The following table gives particulars of the number of men killed or injured in mining accidents during 1942:—

## MINING ACCIDENTS, 1942.

Mining for—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T. (a)	Australia.
KILLED.								
Coal ..	23	..	5	..	2	..	..	30
Copper ..	..	..	(b)	..	..	2	..	2
Gold ..	..	1	(b)	1	18	..	..	20
Silver, lead and zinc ..	3	..	(b)	..	..	1	..	4
Tin ..	..	..	(b)	..	..	..	..	..
Other minerals	(c) 1	..	3	..	..	..	..	4
Total ..	27	1	8	1	20	3	..	60

(a) Not available.

(b) Included with other minerals.

(c) Includes quarries.



MINING ACCIDENTS, 1942—*continued*.

Mining for—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T. (a)	Australia.
INJURED.								
Coal ..	75	7	192	..	252	7	..	533
Copper ..	..	..	(b)	..	..	16	..	16
Gold ..	2	8	(b)	..	811	..	..	821
Silver, lead and zinc ..	151	..	(b)	..	..	13	..	164
Timber ..	..	..	(b)	..	..	4	..	4
Other minerals	(c) 12	..	186	57	..	8	..	263
Total ..	240	15	378	57	1,063	48	..	1,801

(a) Not available.

(b) Included with other minerals.

(c) Includes quarries.

## § 16. Government Aid to Mining.

1. *Commonwealth*.—(i) *General*. Assistance to mining has been given by the Commonwealth under the provisions of the Precious Metals Prospecting Act 1926, the Gold Bounty Act 1930, the Petroleum Oil Search Acts 1936, which superseded the Petroleum Prospecting Acts 1926, 1927 and 1928, the Loan Appropriation (Unemployment Relief) Act 1934, the Northern Australia Survey Act 1934 and the Gold Mining Encouragement Act 1940.

The last-mentioned Act provided financial assistance to the States for the development of the gold-mining industry. The amount granted was £150,000, distributed as follows:—New South Wales, £8,000; Victoria and Queensland, £14,000 each; South Australia, £1,000; Western Australia, £111,000; and Tasmania £2,000. The Act provided further for assistance to bona fide prospectors, marginal producers and low grade mines by refunds, under certain conditions, of the tax on gold.

Expenditure under the other Acts mentioned has been reviewed in previous issues of the Official Year Book. With the exception of the assistance to prospectors, etc., under the Gold Mining Encouragement Act and the Petroleum Oil Search Acts further expenditure under these Acts is not contemplated.

(ii) *Survey of North Australia*. In 1934 the Northern Australia Survey Act was passed. Under this Act the Governments of the Commonwealth and the States of Queensland and Western Australia agreed to co-operate in the conduct of an aerial, geological and geophysical survey over a period of six years of certain areas in Australia north of the 22nd parallel of south latitude. The survey was completed at the end of 1940. The total cost of the survey involved an expenditure of £250,000, of which the Commonwealth Government contributed £140,000, Queensland £67,500 and Western Australia £42,500. The final report was in respect of the period ended 31st December, 1940. In addition to these periodical reports, 180 other reports have been released. These refer to individual areas examined by the survey during the six years of its operations.

(iii) *Search for Oil*. The Commonwealth Government has encouraged the search for oil in Australia, Papua and New Guinea and considerable sums have been spent during recent years in geological surveys and in drilling operations. Details of efforts made during that period are shown in previous issues of the Official Year Book.

In 1936 the Petroleum Oil Search Act was passed and replaced all previous enactments. Under this Act a sum of £250,000 was appropriated to assist in the search for oil in Australia and the Territories of Papua and New Guinea. Considerable preliminary geological surveys have already been conducted and test-drilling has been and still is being done at approved sites in Australia. So far no commercial production has been obtained. An Australian company operating in the Gulf District, Papua, is at present engaged on deep test-drilling.

The moneys made available under the Act mentioned may be applied:—

- (1) to the payment of advances to persons and companies engaged in drilling operations or in the conduct of geological surveys in connexion with the search for petroleum;
- (2) for the purchase of drilling plants;
- (3) towards the cost of any geological survey or scout-drilling operations conducted by the Commonwealth in conjunction with a State in connexion with the search for petroleum; and
- (4) for the purpose of advances to persons engaged in the initial stages of the production of petroleum.

Under the provisions of the Act four modern rotary-drilling plants have been purchased. These are made available on hire to companies engaged in the search. Since their purchase the four plants have been in use in Queensland, Victoria, New South Wales, Western Australia and Papua.

In conjunction with the Government of Victoria the Commonwealth is conducting a scout-drilling campaign in Gippsland.

(iv) *Mineragraphic and Ore-dressing Investigations.* In addition to the assistance mentioned above the Commonwealth Government made a grant of £25,000 in 1934 to the Council for Scientific and Industrial Research to stimulate gold production by conducting mineragraphic and ore-dressing investigations as required by the industry. This amount was expended during the succeeding five years in conducting these investigations, which were carried out conjointly with appropriate State institutions, the three laboratory centres being the School of Mines, Kalgoorlie, the School of Mines and Industries, Adelaide, and the University of Melbourne.

The success of the scheme induced a further grant of £22,000. After providing £1,000 for 1940-41, the balance is to be expended at the rate of £4,000 during each of the succeeding five years. The scheme is administered by a Mining Advisory Committee.

(v) *Standing Committee on Liquid Fuels.* The Commonwealth Government has appointed a Standing Committee on Liquid Fuels to co-ordinate knowledge concerning the production of liquid fuels and the use of substitutes therefor, and to furnish information which will enable Australia to obtain greater independence in regard to fuel supplies. This Committee has undertaken the investigation of such matters as the production of oil from coal, benzol, power alcohol, shale-oil, the use of producer and compressed gas in road vehicles, and tar and other substitutes for fuel oil. Seven reports have been issued by this Committee to date.

2. *New South Wales.*—Assistance given to prospectors in New South Wales during 1942 amounted to £27,122 which was met partly from the Unemployment Relief Fund (£7,717) and partly from funds provided under the National Security (Minerals) Regulations (£19,405).

3. *Victoria.*—Financial assistance to keep their mines unwatered and preserve their assets for future operations has been granted by the Commonwealth Government to several companies which have been forced to suspend operations owing to war conditions and whose workings and plants are liable to serious damage through flooding.

4. *Queensland.*—In 1935 a fund was established for assistance to metalliferous mining in Queensland. The Commonwealth and State contributed £130,500 and £16,804 respectively. During 1941-42 and 1942-43 the Commonwealth Government provided £69,500 for the purpose of accelerating the production of essential minerals by the development of new fields and the reopening of old mines.

Mining operations conducted by the State include three coal-mines situated at Bowen, Styx and at Mount Mulligan, three batteries at Kidston, Charters Towers and Bamford, an assay office at Cloncurry, smelting works at Chillagoe, coke works at Bowen, and the State treatment works at Irvinebank. The battery at Charters Towers continues to be leased privately.

5. **South Australia.**—Aid is given to the mining industry under the terms of the Mining Acts of 1930 and 1931. Assistance from State funds amounted to £26,856. Payments amounting to £44,772 have been made from the Commonwealth Assistance for Metalliferous Mining Fund since 1935 when the State also contributed £17,500. The State maintains batteries and cyanide works at Mount Torrens, Peterborough, Mongolata, Tarcoola and Glenloth, and assays for public purposes are made at the School of Mines.

6. **Western Australia.**—Under the Mining Development Act of 1902 assistance granted in 1942 was as follows :—Aid to prospectors, £6,347 ; subsidies on stone crushed for the public, £407 ; advances in aid of mining work and equipment of mines with machinery, £3,210. Other assistance granted from the vote on various matters during the year amounted to £449. The total amount involved was £10,413.

In 1942 there were 23 State batteries in operation of which three were leased. The amount expended thereon up to the end of 1942 was £93,726 from revenue, £405,461 from loan fund and £42,408 from other sources, giving a total of £541,595. The working expenditure up to the end of 1942 exceeded the revenue by £74,129. The total value of gold and tin produced to the end of 1942 at the State plants was £12,025,373. Free assays and determinations of mineral values for prospectors are made at the Kalgoorlie School of Mines and at the Government laboratory at Perth.

7. **Tasmania.**—Aid to mining in 1942 amounted to £1,627, of which £194 was expended as sustenance and £1,433 as assistance to prospectors and for the provision of other aid.

Tributers' assays are made at a nominal charge, and all tribute surveys are carried out free of charge by the Assay and Survey Office at Zeehan.

8. **Northern Territory.**—During 1939 the assistance granted to prospectors amounted to £1,377. In addition a sum of £11,640 was also granted to assist mining companies and mine owners.

The Government maintains batteries at Maranboy, Pine Creek and Tennant Creek Government Assayers situated at Darwin and Alice Springs make free assays for prospectors, and arrange for the sampling, storage and sale of ores.

## § 17. Metallic Contents of Ores, etc., Produced and Exported.

1. **Local Production.**—According to returns compiled from various sources by the Australian Mines and Metals Association, the quantities of the principal metals (excluding gold) extracted in Australia during the five years 1934 to 1938 were as follows :—

### REFINED METALS PRODUCED IN AUSTRALIA.

Metal.		1934.	1935.	1936.	1937.	1938.
Silver .. ..	oz.	8,674,549	8,983,950	8,498,674	9,510,509	9,357,139
Lead, pig .. ..	tons	160,201	181,211	159,504	186,757	182,214
Zinc .. ..	"	54,629	67,666	70,509	69,750	69,820
Copper .. ..	"	7,970	11,768	13,313	17,400	17,098
Tin .. ..	"	2,330	2,837	2,717	2,907	3,229

NOTE.—Figures for years later than 1938 are not available.



The local production of pig iron during the quinquennium 1923-27 ranged between 330,000 tons in 1923 and 517,000 tons in 1927. Complete information for the later years is not available from the returns published by the Association, but according to the metal extraction returns published in the Statistical Register of New South Wales, the production of pig iron in that State amounted in 1937-38 to 929,676 tons; in 1938-39 to 1,104,605 tons; in 1939-40 to 1,212,006 tons; in 1940-41 to 1,475,707 tons, and in 1941-42 to 1,557,641 tons.

2. **Metallic Contents of Ores, Concentrates, etc., Exported.**—The estimated metallic contents of ores, concentrates, etc., exported during the five years 1934 to 1938 as supplied by the Australian Mines and Metals Association, are given in the following table:—

## METALLIC CONTENTS OF ORES, CONCENTRATES, ETC., EXPORTED.

Metal.		Contained in—	1934.	1935.	1936.	1937.	1938.
Silver	oz.	Lead-Silver-Gold Bullion	1,819,546	2,506,015	2,810,828	3,505,293	3,400,581
		Lead Concentrates and Ores	612,014	275,154	444,052	557,438	831,809
		Zinc Concentrates and Ores	147,522	217,266	222,536	204,840	306,012
		Copper and Gold Ores ..	..	..	..	..	..
		Total .. ..	2,579,082	2,998,435	3,477,416	4,267,571	4,538,402
Lead	tons	Lead-Silver-Gold Bullion	35,804	36,723	33,450	41,773	40,369
		Lead Concentrates and Ores	21,075	9,619	17,497	10,086	15,049
		Zinc Concentrates and Ores	803	1,658	1,587	1,420	1,958
		Total .. ..	57,682	48,000	52,534	53,279	57,376
Zinc	tons	Lead Concentrates and Ores	..	..	..	..	..
		Zinc Concentrates and Ores	26,963	54,693	75,391	76,990	93,561
		Total .. ..	26,963	54,693	75,391	76,990	93,561
Copper	tons	Ores, Matte, etc. ..	1,122	1,361	2,770	2,389	3,228
Tin	tons	Concentrates and Ores ..	198	289	246	192	102

NOTE.—Figures for years later than 1938 are not available.

## CHAPTER XXI.

### PASTORAL PRODUCTION.

#### § 1. Initiation and Growth of Pastoral Industry.

1. **Early Statistics.**—The live stock which Captain Phillip brought with him when establishing the first settlement in January, 1788, is stated to have comprised seven horses, six cattle, twenty-nine sheep, twelve pigs and a few goats. Later in the same year in a letter from Captain Phillip to Lord Sydney, then Secretary of State for the Colonies, an enclosure sets forth the number of each kind of live stock in the colony on 1st May, 1788. These details together with those of later enumerations are shown in the following table :—

**LIVE STOCK : AUSTRALIA.**

Date.		Horses.	Cattle.	Sheep.	Pigs.	Goats.
1st May, 1788 ..	..	7	7	29	74	19
10th November, 1791 ..	..	4	18	57	37	(a)
1st July, 1794 ..	..	(b) 20	40	576	(a)	522
15th June, 1795 ..	..	(c) 49	176	832	(a)	985
1st September, 1796 ..	..	57	227	1,531	1,869	1,427
15th August, 1800 ..	..	203	1,044	6,124	4,026	2,182

(a) Not stated.

(b) Excludes three asses.

(c) Excludes seven asses.

The return for the year 1788 includes, in addition to poultry, five rabbits.

2. **Subsequent Statistics.**—The statistical returns of live stock in Australia subsequent to the year 1800 referred mainly to those in possession of the Government, omitting those owned by individuals. Doubtless the growth of population, the expansion of the area settled and the increase of private ownership made it difficult in those early times to secure accurate returns. The figures continued to be somewhat defective up to 1860, but from that year onwards fairly complete information is available for most of the States. At the present time, statistics of live stock are collected annually in all the States principally through the agency of the police, but in the years 1885 to 1888 inclusive, and 1893 to 1895 inclusive, these particulars were not collected in South Australia, and similar gaps occur in the Victorian records for the periods 1895 to 1899 inclusive and 1901 to 1903. In order to obtain totals for Australia for these years the missing numbers have been supplied by interpolation. The results so obtained probably differ only slightly from the actual numbers for the respective years.

3. **Increase in Live Stock.**—Particulars concerning the numbers of each of the principal kinds of live stock in Australia at decennial intervals from 1860 to 1930, and from 1934 onwards in single years are given in the following table, and are shown continuously on the graph on page 706.

During the eighty-three years covered by the table the live stock of Australia increased considerably, horses, 251 per cent. ; cattle, 254 per cent. ; sheep, 518 per cent. ; and pigs, 345 per cent. The average annual increases which these aggregates represent are as follows :—Horses, 1.52 per cent. ; cattle, 1.53 per cent. ; sheep, 2.22 per cent. ; and pigs, 1.82 per cent.

## LIVE STOCK : AUSTRALIA.

Year.				Horses.	Cattle.	Sheep.	Pigs.
1860	..	..	..	431,525	3,957,915	20,135,286	351,096
1870	..	..	..	716,772	4,276,326	41,593,612	543,388
1880	..	..	..	1,068,774	7,527,142	62,184,252	815,776
1890	..	..	..	1,521,598	10,299,816	97,881,221	891,138
1900	..	..	..	1,609,654	8,640,225	70,602,995	950,349
1910	..	..	..	2,165,866	11,744,714	98,066,046	1,025,850
1920	..	..	..	2,415,510	13,499,737	81,795,727	764,406
1930	..	..	..	1,792,734	11,720,916	110,568,279	1,071,679
1934	..	..	..	1,763,225	13,512,486	109,921,053	1,046,867
1935	..	..	..	1,767,758	14,048,671	113,048,037	1,158,274
1936	..	..	..	1,764,430	13,911,659	108,875,801	1,293,964
1937	..	..	..	1,762,750	13,491,872	110,242,704	1,202,752
1938	..	..	..	1,746,513	13,078,356	113,372,518	1,100,082
1939	..	..	..	1,724,056	12,861,781	111,057,832	1,155,591
1940	..	..	..	1,698,797	13,080,180	119,305,391	1,455,341
1941	..	..	..	1,665,616	13,255,841	122,694,025	1,797,340
1942	..	..	..	1,611,059	13,560,754	125,189,129	1,477,303
1943 (31st March)	..	..	..	1,517,970	14,005,320	124,614,672	1,563,000

4. *Fluctuations.*—The increases referred to, however, have not been continuous, marked fluctuations having taken place during the period, mainly on account of droughts which have from time to time left their impress on the pastoral history of Australia. These occurred in 1868, 1877, 1883-4, 1892, 1893, 1895, 1901-2, 1912, 1914, 1918, 1919, 1922-23, 1925-26, 1927-28, 1929-30 and 1940-41.

The years in which the number of live stock attained their maxima are as follows :—Horses, 1918, 2,527,149 ; cattle, 1921, 14,441,309 ; sheep, 1942, 125,189,129 ; and pigs, 1941, 1,797,340.

5. *Live Stock in Relation to Population.*—The number of each kind of live stock per head of the population of Australia has varied during the past eighty-three years as shown in the following table :—

## LIVE STOCK PER HEAD OF POPULATION : AUSTRALIA.

Year.		Horses.	Cattle.	Sheep.	Pigs.	Year.		Horses.	Cattle.	Sheep.	Pigs.
1860	..	0.38	3.45	17.58	0.31	1930	..	0.28	1.81	17.07	0.17
1870	..	0.43	2.60	25.24	0.33	1938	..	0.26	1.91	16.59	0.16
1880	..	0.48	3.37	27.87	0.37	1939	..	0.25	1.87	16.11	0.16
1890	..	0.48	3.17	31.06	0.28	1940	..	0.24	1.86	16.97	0.21
1900	..	0.43	2.29	18.75	0.25	1941	..	0.23	1.87	17.28	0.25
1910	..	0.49	2.65	22.16	0.23	1942	..	0.22	1.89	17.46	0.21
1920	..	0.44	2.49	15.11	0.14	1943	..	0.21	1.94	17.24	0.22



6. Live Stock in Relation to Area.—The number of live stock per square mile in the several States and Territories of Australia are given in the following table :—

### LIVE STOCK PER SQUARE MILE, 1943.

State or Territory.	Horses.	Cattle.	Sheep.	Pigs.
New South Wales .. .. .	1.56	9.79	181.12	1.57
Victoria .. .. .	3.33	23.02	223.18	3.50
Queensland .. .. .	0.59	9.64	38.26	0.61
South Australia .. .. .	0.43	1.12	27.29	0.41
Western Australia .. .. .	0.12	0.85	10.68	0.16
Tasmania .. .. .	1.03	9.33	84.95	1.88
Northern Territory .. .. .	0.08	1.87	0.07	0.00
Australian Capital Territory .. .. .	1.22	7.42	266.61	0.83
Australia .. .. .	0.51	4.71	41.89	0.53

7. Minor Classes of Live Stock.—Excluding Victoria, where the details are not available, the number of minor classes of live stock returned for 1941, were as follows :—Goats, 80,366; camels, 2,267; and mules and donkeys, 10,881. Of these, goats were most numerous in Queensland, and camels, mules and donkeys in Western Australia. In the raising of goats, some attention has been devoted to the angora goat and its product (mohair), and upwards of 5,000 angora goats are included in the number of goats shown above. Of these, 1,640 were in New South Wales, 1,000 in Queensland, 1,531 in South Australia, and 284 in Tasmania.

8. Net Exports of Principal Pastoral Products.—The quantities by which the exports of the principal pastoral products of Australia exceeded the imports for the years 1938–39 to 1942–43 were as follows :—

### NET EXPORTS OF PASTORAL PRODUCTS : AUSTRALIA.

Product.	Unit of Quantity.	1938–39.	1939–40.	1940–41.	1941–42.	1942–43.
QUANTITIES.						
Animals (living)—						
Cattle .. .. .	No.	405	371	248	56	322
Horses .. .. .	"	2,294	1,503	1,668	222	1,110
Sheep .. .. .	"	66,739	72,385	86,265	64,750	5,107
Bones .. .. .	Cwt.	21,497	11,854	2,252	8,502	—200
Glue-pieces and Sinews .. .. .	"	—11,145	—15,651	—5,443	—7,209	—10,669
Glycerine .. .. .	lb.	78,727	—683,076	—1,940,472	—2,016,918	—705,483
Hair .. .. .	"	—1,003,366	—2,650,898	—1,259,343	—1,402,642	—327,684
Hoofs .. .. .	Cwt.	(a)	(a)	(a)	1,086	..
Horns .. .. .	"	(a)	(a)	(a)	(a)	(a)
Meats—						
Frozen Beef (b) .. .. .	lb.	271,948,548	273,892,215	198,625,039	117,070,259	22,621,078
" Mutton and Lamb .. .. .	"	186,487,551	248,666,663	238,925,384	174,914,611	203,681,520
" Rabbits and Hares .. .. .	Pair	(a)	(a)	(a)	(a)	(a)
" Other .. .. .	lb.	19,588,368	25,810,972	23,718,637	8,672,238	15,351,235
Potted, and Extract of .. .. .	"	(a)	(a)	(a)	(a)	(a)
Preserved in Tins, etc. .. .. .	lb.	14,778,896	23,143,950	42,444,796	94,059,281	66,736,683
Other (excluding Bacon and Ham) .. .. .	"	308,448	732,892	1,321,135	696,512	2,913,961
Sausage Casings .. .. .	Cwt.	8,673	4,427	17,178	11,191	14,601
Skins—						
Hides .. .. .	No.	(a)	(a)	(a)	(a)	(a)
Sheep .. .. .	"	(a)	(a)	(a)	(a)	(a)
Rabbit and Hare .. .. .	Cwt.	37,544	(c) 65,319	(c) 88,313	(c) 76,831	(c) 54,773
Other (including Undressed Furs) .. .. .	"	(a)	(a)	(a)	(a)	(a)
Tallow .. .. .	Cwt.	560,241	803,096	548,428	652,630	99,059
Wool—						
Greasy .. .. .	lb.	779,781,662	791,663,332	486,744,671	735,134,359	516,775,265
Scoured .. .. .	"	70,299,595	77,817,838	60,079,146	92,245,202	51,666,359
Tops .. .. .	"					
Noils .. .. .	"					
Waste .. .. .	"					

(a) Quantity not available.

(b) Includes chilled beef.

(c) Rabbit skins only.

NOTE.—The minus sign (—) signifies net imports.

The values of the net exports for the same five years are furnished in the next table, and amount to £317,124,804 for the period, or an average of £63,424,961 per annum, of which wool represents 74.86 per cent. Meat, skins and tallow rank next in order of importance.

## NET EXPORTS OF PASTORAL PRODUCTS : AUSTRALIA.

Product.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
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## VALUES. (a)

	£	£	£	£	£
<b>Animals (living)—</b>					
Cattle .. .. .	142	2,111	3,214	-38	6,193
Horses .. .. .	-11,258	-20,594	89,005	16,172	35,089
Sheep .. .. .	39,405	58,508	86,872	49,280	6,269
Bones .. .. .	10,741	6,541	2,768	4,609	-41
Glue-pieces and Sinews .. .. .	-7,796	-10,750	-3,690	-7,221	-9,444
Glycerine .. .. .	4,004	-13,429	-73,713	-149,830	-48,633
Hair .. .. .	-103,353	-157,920	-184,941	-188,193	-13,007
Hoofs .. .. .	8,027	6,123	4,897	755	..
Horns .. .. .	18,615	13,462	3,253	1,993	520
<b>Meats—</b>					
Frozen Beef(b) .. .. .	4,323,235	4,825,237	3,761,732	2,484,259	560,498
" Mutton and Lamb .. .. .	4,807,418	6,082,341	6,142,479	4,669,871	5,495,886
" Rabbits and Hares .. .. .	232,034	355,436	102,175	8,901	12,917
" Other .. .. .	417,670	590,259	630,998	269,909	430,587
Potted, and Extract of .. .. .	-32,580	-25,135	47,620	96,900	87,407
Preserved in Tins, etc. .. .. .	492,709	916,609	1,867,208	4,543,550	3,018,150
Other (excluding Bacon and Ham) .. .. .	6,336	16,430	28,169	18,207	298,502
Sausage Casings .. .. .	185,649	52,739	203,724	12,273	268,353
<b>Skins—</b>					
Hides .. .. .	775,398	551,892	402,228	-89,361	-339,523
Sheep .. .. .	2,336,718	2,357,884	975,458	2,136,428	1,385,480
Rabbit and Hare .. .. .	393,641	(c) 881,777	1,201,420	1,305,751	1,086,198
Other (including Undressed Furs) .. .. .	-287,277	-368,355	228,430	167,880	65,715
Tallow .. .. .	480,459	846,534	554,635	830,695	185,945
<b>Wool—</b>					
Greasy .. .. .	36,617,167	46,758,717	32,553,757	47,747,308	37,613,502
Scoured .. .. .					
Tops .. .. .	5,277,117	7,245,209	6,729,935	10,151,025	6,623,638
Noils .. .. .					
Waste .. .. .					
<b>Total Values .. .. .</b>	<b>55,984,221</b>	<b>70,971,626</b>	<b>56,357,633</b>	<b>76,141,123</b>	<b>57,670,201</b>

(a) Australian currency values.

(b) Includes chilled beef.

(c) Rabbit skins only.

NOTE.—The minus sign (—) signifies net imports.

9. Value of Pastoral Production.—(i) *General.* Particulars of the gross, local and net values of pastoral production for each State are shown in the following table for 1942-43. Fuller details of the source of the information and an explanation of the terms used in this compilation will be found in Chapter XXVII. "Miscellaneous". Maintenance costs have not been computed in all States and depreciation has not been deducted; consequently the net values are inflated to the extent of these costs.

## GROSS, LOCAL AND NET VALUES OF PASTORAL PRODUCTION, 1942-43.

State.	Gross Production valued at Principal Markets.	Marketing Costs.	Gross Production valued at Farm.	Farm Costs.		Net Value of Production. (a)
				Seed used, and Fodder for Farm Stock.	Value of other materials used in process of Production.	
	£	£	£	£	£	£
New South Wales	43,487,000	3,980,000	39,507,000	1,020,000	(b) 275,000	38,212,000
Victoria	27,716,502	1,976,001	25,739,901	430,000	543,252	24,766,649
Queensland	25,681,000	2,380,000	23,301,000	920,000	370,000	22,011,000
South Aust.	8,458,490	864,253	7,594,237	232,951	228,811	7,132,475
Western Aust.	8,077,390	742,789	7,334,601	368,686	282,473	6,683,442
Tasmania	2,471,770	183,770	2,288,000	56,720	22,670	2,208,610
Total	115,892,152	10,127,413	105,764,739	3,028,357	1,722,206	101,014,176

(a) No deduction has been made for depreciation and maintenance.  
for costs of power, power kerosene, petrol and other oils.

(b) No allowances made

(ii) *States 1933-34 to 1942-43.* The following table shows the net value of pastoral production by States and the net value per head of population, for the years 1933-34 to 1942-43:—

## VALUE OF PASTORAL PRODUCTION.

Year.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Total.
NET VALUE. (a)							
	£	£	£	£	£	£	£
1933-34	34,259,000	15,903,468	12,833,102	4,500,047	5,642,524	1,607,550	74,806,591
1934-35	23,311,000	13,305,109	11,004,135	3,181,285	3,916,280	1,040,690	55,758,499
1935-36	32,709,000	17,422,400	11,561,000	4,602,050	5,350,216	1,492,460	73,227,732
1936-37	30,300,000	19,502,210	14,112,000	5,217,250	4,597,230	1,692,580	84,421,276
1937-38	33,030,000	18,533,223	15,364,000	4,856,620	4,003,310	1,470,580	78,166,742
1938-39	23,613,000	15,150,276	14,881,000	5,054,784	3,666,461	1,449,590	63,821,111
1939-40	34,562,000	16,434,392	17,093,000	6,206,617	4,689,845	1,802,150	81,388,004
1940-41	35,305,000	18,629,094	17,624,000	6,084,562	4,519,541	1,789,450	83,951,647
1941-42	34,121,000	20,467,898	18,117,000	5,779,743	4,879,433	1,993,050	85,358,124
1942-43	38,212,000	24,766,649	22,011,000	7,132,475	6,683,442	2,208,610	101,014,176

## NET VALUE PER HEAD OF MEAN POPULATION. (a)

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1933-34	13 2 3	8 14 3	13 10 0	7 16 7	12 16 3	7 0 4	11 4 9
1934-35	8 16 11	7 4 10	11 9 0	5 8 11	8 16 9	4 10 10	8 6 5
1935-36	12 6 11	9 9 1	11 17 10	7 17 0	11 18 11	6 9 7	10 16 11
1936-37	14 13 2	10 10 7	14 6 10	8 17 4	10 3 6	7 5 9	12 8 2
1937-38	12 10 7	9 19 2	15 8 9	8 4 5	8 15 1	6 5 2	11 7 9
1938-39	8 12 9	8 1 8	14 15 7	8 10 1	7 18 5	6 2 4	9 4 3
1939-40	12 10 5	8 13 11	17 6 9	10 7 5	10 0 3	7 10 8	11 12 8
1940-41	12 13 9	9 14 0	17 1 5	10 3 1	9 11 2	7 8 11	11 17 6
1941-42	12 3 6	10 9 7	17 9 0	9 10 4	10 8 3	8 6 2	11 19 2
1942-43	13 10 0	12 11 4	21 2 1	11 12 9	13 18 4	9 3 0	14 0 7

(a) No deduction has been made for depreciation and maintenance.



10. **Consumption of Meats.**—Particulars of the per capita consumption of meat in Australia are shown in the following table, together with details for certain other countries. The figures have in each case been obtained from official sources, but it is uncertain whether they have been compiled on the same basis.

The average consumption in Australia is slightly lower than that in New Zealand, but it is greatly in excess of that in Canada, United Kingdom and the United States of America. Compared with Australia the consumption of beef, mutton and lamb in these countries is relatively small, but pork consumption is greatly in excess of the average recorded for both Australia and New Zealand.

The world's supply of beef, mutton and lamb is obtained chiefly from countries situated in the Southern Hemisphere of which Argentina, Australia, New Zealand and Uruguay are the main contributors. Argentina furnishes the largest export of beef and New Zealand that of mutton and lamb, while Australia occupies second place in both commodities. Supplies of pork and pork products are largely drawn from countries in the Northern Hemisphere. It is to be expected, therefore, that the per capita consumption of beef, mutton and lamb will be the greatest in the southern producing countries, and pig meat in the northern.

#### ESTIMATED PER CAPITA CONSUMPTION OF MEAT : AUSTRALIA AND OTHER COUNTRIES.

Description.	Australia, 1912-43.	New Zealand.	Great Britain, 1937.	Canada, 1938.	United States of America, 1939.
	lb.	lb.	lb.	lb.	lb.
Beef and Veal .. ..	149.11	140-150	69	63.2	60.8
Mutton and Lamb .. ..	99.16	82	30	5.8	6.6
Pork and Bacon and Ham ..	(a) 11.86	22	42	56.8	63.6
Total All Meats .. ..	2260.13	(b) 249	141	125.8	131.0

(a) Excludes Bacon and Ham.

(b) Excludes Veal.

## § 2. Horses.

1. **Suitability of Australia for Horse-breeding.**—From the earliest times the suitability of the climate and pastures of Australia for the production of serviceable breeds of horses has been fully recognized. By the importation of high-class sires, and the careful selection of breeding mares, these natural advantages have been utilized to the fullest extent in breeding all classes of horses. As a consequence of this combination of advantages, the Australian horse, whether of the heavy draught, medium weight, or light saddle variety, compares more than favourably with the product of other lands. The Australian horse is highly regarded by the military authorities in India and considerable numbers are purchased each year for remount purposes. Owing to the mechanization of the Army the demand has not been so great as in former years.

2. **Distribution throughout Australia.**—The States of New South Wales, Queensland and Victoria together depasture more than 76 per cent. of the total number of horses in Australia. In the following table figures are given for each State and Territory during each of the last five years :—

#### HORSES : NUMBER.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Total.
1939	531,355	343,828	444,521	195,834	143,674	30,458	33,191	1,195	1,724,950
1940	534,837	320,217	444,956	190,013	139,207	29,605	32,721	1,241	1,698,797
1941	531,776	318,441	441,770	182,206	130,057	29,406	30,716	1,244	1,665,616
1942	525,697	302,401	431,393	171,092	124,402	28,612	26,200	1,283	1,611,050
1943	483,277	202,534	392,639	164,855	112,782	27,077	43,663	1,143	1,517,970

The number of horses attained its maximum in Australia during 1918, when a total of 2,527,149 was recorded; in the same year the United States of America made its highest recording, and Canada reported likewise in 1921. The number in Australia had declined considerably since 1918 as the result of the development in motor transportation and the increasing use of petrol-driven cultivating and other machinery on farms.

During the past five years the rate of decline has slightly increased, despite the introduction of rationing of motor spirit as a war-time measure.

The number of horses in Australia from 1860 onwards may be obtained from the graph on page 706.

3. **Proportions in the Several States and Territories.**—The percentages of the number of horses in the several States and Territories on the total for Australia for 1943 were:—New South Wales, 31.84; Victoria, 19.27; Queensland, 25.87; South Australia, 10.86; Western Australia, 7.42; Tasmania, 1.78; Northern Territory, 2.88; and Australian Capital Territory, 0.08 per cent.

The percentages in the various States have remained fairly constant during the last quinquennium.

4. **Relation to Population.**—In proportion to population, horses are much more numerous in the Northern Territory than in any other of the principal divisions of Australia. Queensland is next in order, while the Australian Capital Territory and Tasmania have the smallest number of horses per head. The number per head of population has declined in all the statistical divisions since 1927. For the year 1943 the relative numbers were:—New South Wales, 0.17; Victoria, 0.15; Queensland, 0.38; South Australia, 0.27; Western Australia, 0.24; Tasmania, 0.11; Northern Territory, 4.27; Australian Capital Territory, 0.11; and Australia, 0.21.

5. **Comparison with other Countries.**—The latest particulars of the number of horses in the leading horse-breeding countries of the world are as follows:—

#### HORSES : NUMBER IN PRINCIPAL COUNTRIES.

Country.	Year.	Number of Horses (,000 omitted).	Country.	Year.	Number of Horses (,000 omitted).
U.S.S.R. (Russia) ..	1938	17,500	Turkey ..	1938	651
U.S.A. ..	1938	10,800	Uruguay ..	1930	623
Argentina ..	1937	8,527	Sweden ..	1938	617
Brazil ..	1935	6,052	Cuba ..	1934	569
China ..	1935	4,080	Spain ..	1933	568
Poland ..	1938	3,886	Denmark ..	1938	565
Germany ..	1938	3,443	Lithuania ..	1938	558
Canada ..	1938	2,821	Bulgaria ..	1934	532
France ..	1938	2,692	Chile ..	1936	528
India (British and Native) ..	1936	2,380	Eire ..	1938	442
Rumania ..	1937	2,167	Peru ..	1932	432
Mexico ..	1932	1,888	Haiti ..	1935	400
Manchuria ..	1936	1,840	Latvia ..	1938	400
<b>Australia ..</b>	<b>1939</b>	<b>1,724</b>	Bolivia ..	1932	390
Japan ..	1936	1,432	Thailand ..	1938	386
Yugoslavia ..	1938	1,265	Finland ..	1937	380
United Kingdom ..	1938	1,100	Greece ..	1937	372
Colombia ..	1934	972	Netherlands ..	1938	312
Hungary ..	1938	814	New Zealand ..	1938	278
Italy ..	1938	791	Belgium ..	1938	265
Union of South Africa	1937	778	Austria ..	1938	246
Czechoslovakia ..	1936	704	Estonia ..	1938	219
Dutch East Indies ..	1937	671	French Morocco ..	1938	192
			Paraguay ..	1935	186

6. **Oversea Trade in Horses.**—(i) *Exports.* Australia's export trade in horses is far below that of earlier years. During the period 1901–5 the average number exported was over 18,000, whereas during the last five years the figure was 1,463. The total number of horses exported during the latter period amounted to 7,316, valued at £410,255 equal to an annual average of 1,463, valued at £82,051. The average export price was £56 1s. 8d. The horses exported to India, where they are largely used for army remounts, averaged 658 or 48 per cent. of the average exports for the quinquennium.

(ii) *Imports.* The number of horses imported into Australia is comparatively small, consisting mainly of valuable stud animals from the United Kingdom and racehorses from New Zealand. The average value per head of the horses imported during the last five years was £A580. The average number imported per annum was, however, only 104, and the average annual value, £60,368. The following tables gives the imports, exports and net exports of horses during each of the years from 1938–39 to 1942–43 :—

#### HORSES : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
		£ A.		£A.		£A.
1938–39 ..	238	125,192	2,532	113,934	2,294	— 11,258
1939–40 ..	190	100,688	1,693	80,094	1,503	— 20,594
1940–41 ..	51	39,619	1,719	128,624	1,668	89,005
1941–42 ..	35	33,075	257	49,247	222	16,172
1942–43 ..	5	3,268	1,115	38,356	1,110	35,088

NOTE.—The minus sign (—) signifies net imports.

### § 3. Cattle.

1. **Purposes for which Raised.**—Cattle-raising is carried out in all the States, the main object in certain districts being the production of stock suitable for slaughtering purposes, and in others the raising of profitable dairy herds. The great impetus which the development of the export trade in Australian butter gave to the dairying industry led to a considerable increase in numbers and an improvement in quality of the dairy herds in Victoria, New South Wales and Southern Queensland in particular, the portion of Australia in the temperate zone being the best adapted to this industry. On the other hand, beef-producing cattle are mainly raised in the tropical districts, i.e., in the northern parts of Queensland, in the Northern Territory, and in the Kimberley district in the north of Western Australia.

2. **Distribution throughout Australia.**—Until 1880, New South Wales was the principal cattle-raising State, but in that year Queensland occupied the leading position, which it has since maintained. There was a very rapid increase in the number of cattle in Australia up to the year 1894, when 12,311,617 head were depastured. From 1895 onwards, however, the effects of droughts and the ravages of tick fever reduced the number to 7,062,742 in 1902. Following the disastrous drought which terminated in the latter year the herds were gradually built up, and, despite recurring droughts, they continued to increase until the maximum number of 14,441,300 cattle was attained in 1921. After that year the number dropped continuously to 1929, largely owing to the decline in the oversea demand for frozen beef. They recovered with the expansion of dairying during the depression years, but a decline of nearly 1,000,000 occurred since 1934. In 1943 the upward movement commenced in 1940 was continued in all States excepting Western Australia and Tasmania, and the total number of cattle (14,005,320) is now at its highest level since 1935. A graph showing the number of cattle in Australia from 1860 appears on page 706.



The numbers of cattle, beef and dairy, in the several States and Territories during each of the last five years are as follows:—

## CATTLE : NUMBER.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aus. Cap. Terr.	Total.
1939	2,811,884	1,697,295	6,097,089	318,897	767,680	262,407	899,472	7,057	12,861,781
1940	2,702,053	1,787,597	6,198,796	351,013	799,175	252,484	922,581	5,879	13,080,180
1941	2,769,001	1,922,336	6,210,810	370,054	788,928	259,108	922,308	6,636	13,255,841
1942	2,878,450	1,986,541	6,303,407	399,143	830,731	253,106	892,881	7,432	13,560,754
1943	3,030,546	2,022,892	6,466,316	424,253	831,231	244,681	978,434	6,967	14,005,320

Although the proportion is not as high as it has been in the past, Queensland was carrying 46.17 per cent. of the cattle in Australia in 1943. The percentage in each State and Territory during 1943 was:—New South Wales, 21.64; Victoria, 14.44; Queensland, 46.17; South Australia, 3.03; Western Australia, 5.93; Tasmania, 1.75; Northern Territory, 6.99; Australian Capital Territory, 0.05.

A graph showing the distribution of cattle in Australia during 1938–39 is shown in the Official Year Book No. 34, p. 453. A similar graph showing the distribution during 1924–25 is shown in Official Year Book No. 22, p. 660.

3. Comparison with other Countries.—The following table shows the number of cattle in Australia and in some of the principal cattle-raising countries of the world at the latest available date:—

## CATTLE : NUMBER IN VARIOUS COUNTRIES.

Country.	Year.	Number of Cattle (,000 omitted).	Country.	Year.	Number of Cattle (,000 omitted).
India (British and Native) ..	1936	119,437	Czechoslovakia ..	1937	4,938
U.S.A. ..	1938	66,821	Cuba ..	1935	4,651
U.S.S.R. (Russia) ..	1938	63,200	New Zealand ..	1938	4,506
Brazil ..	1935	40,514	Dutch East Indies ..	1937	4,414
Argentina ..	1937	33,101	Yugoslavia ..	1938	4,268
China ..	1935	22,647	Rumania ..	1937	4,184
Germany ..	1938	19,911	French Equatorial and West Africa ..	1937	4,073
France ..	1938	15,622	Eire ..	1938	4,056
Australia ..	1939	12,862	Spain ..	1933	3,570
Union of South Africa ..	1937	11,395	Denmark ..	1938	3,238
Poland ..	1938	10,554	Paraguay ..	1935	3,052
Mexico ..	1930	10,083	Sweden ..	1938	3,036
United Kingdom ..	1938	8,903	Nigeria ..	1937	2,985
Colombia ..	1935	8,337	Rhodesia ..	1937	2,936
Uruguay ..	1937	8,297	Netherlands ..	1938	2,764
Canada ..	1938	8,091	Venezuela ..	1929	2,750
Italy ..	1938	7,667	Sudan (Anglo-Egyptian) ..	1938	2,700
Turkey ..	1938	5,896	Austria ..	1936	2,596
Thailand ..	1938	5,712	Uganda ..	1938	2,582
Kenya ..	1932	5,214	Chile ..	1937	2,460
Tanganyika Territory ..	1937	5,035	Bolivia ..	1931	2,064
Madagascar ..	1937	4,947			

4. **Imports and Exports of Cattle.**—The products of the cattle-raising industry figure largely in the export trade of Australia, although the export of live cattle has never been large. The number of cattle imported is also small, consisting, as in the case of horses, mainly of valuable animals for stud purposes. Details for the last five years are as follows:—

**CATTLE : IMPORTS AND EXPORTS, AUSTRALIA.**

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
		£A.		£A.		£A.
1938-39 ..	42	9,431	447	9,573	405	142
1939-40 ..	48	5,555	419	7,666	371	2,111
1940-41 ..	15	1,359	263	4,573	248	3,214
1941-42 ..	25	1,313	81	1,275	56	—38
1942-43 ..	14	1,655	336	7,848	322	6,193

NOTE.—The minus sign (—) signifies net imports.

The average value of the cattle imported during the last five years was £A134 2s. 4d. per head, while the average value of the cattle exported during the same period was £20 os. 2d. As previously stated, the imported cattle were required principally for stud purposes.

5. **Cattle Slaughtered.**—The number of cattle slaughtered during each of the years 1938 to 1942 is given in the following table:—

**CATTLE (INCLUDING CALVES) SLAUGHTERED.**

Year.	N.S.W. (a)	Victoria. (b)	Q'land. (b)	S. Aust.	W. Aust.	Tas. (b)	N. Terr.	A.C.T. (b)	Total.
1938	1,136,024	811,703	1,284,405	160,044	126,580	50,397	9,105	2,600	3,580,927
1939	1,122,056	737,260	1,256,953	151,135	118,648	48,128	6,072	2,620	3,446,072
1940	901,725	722,604	1,136,796	156,537	114,862	48,246	10,271	2,858	3,003,899
1941	1,040,623	753,817	1,105,586	153,667	111,092	50,819	10,300	2,814	3,228,718
1942	1,060,679	753,224	1,063,541	176,743	105,248	52,739	49,727	3,600	3,250,501

(a) Year ended 31st March of year following.

(b) Year ended 30th June of year following.

6. **Production and Consumption of Beef.**—The production of beef in Australia during 1942-43 was estimated at 1,197,210,395 lb. The local market absorbed 1,073,427,336 lb. or approximately 90 per cent., leaving a balance of 123,783,059 lb. or 10 per cent., which was exported as frozen, chilled or canned beef. (See also § 1 par. 10.) Beef consumption per head over the last five years was as follows:—1938-39, 139 lb. per head; 1939-40, 128 lb. per head; 1940-41, 126 lb. per head; 1941-42, 120 lb. per head; and 1942-43, 149 lb. per head. The sudden increase in per capita consumption of beef in 1942-43 after a steady fall over the previous four years is due to the increased consumption by Allied Servicemen in Australia.

7. **Exports of Frozen Beef.**—The export of frozen meat from Australia dates from about 1881, and since that year the trade had grown considerably, the quantities and values exported during each of the five years ended 1942-43 being as follows:—1938-39, 271,963,829 lb., £4,323,680; 1939-40, 273,892,251 lb., £4,619,058; 1940-41, 194,576,226 lb., £3,680,940; 1941-42, 116,340,293 lb., £2,476,172 and 1942-43, 22,419,121 lb., £555,285. Chilled beef is included in the foregoing. In normal times the largest purchaser of Australian beef is the United Kingdom, which during 1938-39 took £3,901,691, or about 90.2 per cent. of the total shipments. Other countries importing Australian beef were in order of importance Egypt, Malaya (British), Malta, Philippine Islands and Hong Kong; these countries, together with the United Kingdom, accounted for 98.6 per cent. of the total value of the export.

In view of the preference for chilled beef overseas the Australian beef industry was at a serious disadvantage until investigations proved that beef could be successfully transported from Australia to United Kingdom in a chilled condition. Trial shipments of 254,000 lb. in 1932-33 and 1,515,000 lb. in 1933-34 were made, and the exports in subsequent years increased as follows:—1934-35, 21,570,928 lb., £322,239; 1936-37 41,869,695 lb., £608,175; and 1938-39, 58,963,009 lb., £988,148. However the advent of war seriously affected the export trade in chilled beef, which decreased as follows:—1939-40, 12,786,859 lb., £206,353; 1940-41, nil; 1941-42, 1,697 lb., £70 and 1942-43, 1,843 lb., £69.

8. **War-time Contract.**—The Government of the United Kingdom has contracted to purchase Australian beef. Fuller particulars will be found in Chapter XXVII. "Miscellaneous".

9. **Agreements Regarding Meat at the Ottawa Conference.**—A stimulus to the Australian meat industry was provided by the agreement at the Imperial Economic Conference at Ottawa in August, 1932, under the terms of which the Government of the United Kingdom undertook to regulate importations of foreign meat from 1st January, 1932.

10. **Imports of Chilled and Frozen Beef into the United Kingdom.**—The following statement shows the quantities and values of chilled and frozen beef imported into the United Kingdom during each of the five years 1935 to 1939. Later details are not available for publication.

#### IMPORTS OF CHILLED AND FROZEN BEEF IN QUARTERS AND SIDES INTO THE UNITED KINGDOM.

Country of Origin.	1935.	1936.	1937.	1938.	1939.
CHILLED—QUANTITY.					
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
Brazil .. .. .	508,512	508,653	496,818	517,374	500,982
Uruguay .. .. .	561,560	545,283	583,689	558,708	428,076
Argentina .. .. .	6,937,141	7,108,768	6,993,075	6,888,542	5,225,350
Australia .. .. .	228,473	295,433	451,967	527,608	430,396
Other British Countries ..	249,863	321,548	444,150	471,269	439,344
Total Chilled ..	8,485,549	8,779,685	8,969,699	8,963,501	7,024,148
CHILLED—VALUE.					
	£	£	£	£	£
Brazil .. .. .	793,741	809,936	909,703	981,920	916,904
Uruguay .. .. .	907,452	839,141	1,046,813	1,046,882	775,465
Argentina .. .. .	11,529,888	12,001,446	13,449,779	13,788,986	10,338,878
Australia .. .. .	352,090	457,663	857,343	985,526	767,081
Other British Countries ..	376,583	442,696	793,989	873,038	763,112
Total Chilled ..	13,959,754	14,550,882	17,057,627	17,676,352	13,561,440
FROZEN—QUANTITY.					
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
Brazil .. .. .	11,245	3,421	7,900	3,879	3,355
Uruguay .. .. .	41,971	36,090	53,974	72,147	116,352
Argentina .. .. .	93,933	113,479	111,798	158,522	1,746,760
Other Foreign Countries ..	..	..	1	..	739
Australia .. .. .	1,104,511	1,055,162	1,325,749	1,186,955	1,317,318
New Zealand .. .. .	464,758	277,904	246,999	207,486	230,727
Other British Countries ..	4,509	4,248	12,413	1,454	31,960
Total Frozen ..	1,720,927	1,490,304	1,758,834	1,630,443	3,447,211
Grand Total (Chilled and Frozen) ..	10,206,476	10,269,989	10,728,533	10,593,944	10,471,359



**IMPORTS OF CHILLED AND FROZEN BEEF IN QUARTERS AND SIDES  
INTO THE UNITED KINGDOM—continued.**

Country of Origin.	1935.	1936.	1937.	1938.	1939.
<b>FROZEN—VALUE.</b>					
	£	£	£	£	£
Brazil .. ..	17,417	5,230	12,199	6,768	6,962
Uruguay .. ..	78,018	62,610	94,434	134,471	233,888
Argentina .. ..	159,524	172,338	199,506	290,141	3,741,428
Other Foreign Countries .. ..	..	..	2	..	1,388
Australia .. ..	1,481,103	1,316,743	1,969,902	1,885,549	2,139,052
New Zealand .. ..	606,849	344,012	363,996	313,359	332,519
Other British Countries .. ..	6,134	5,143	18,792	2,054	68,068
Total Frozen .. ..	2,349,045	1,906,076	2,658,831	2,632,342	6,523,305
Grand Total (Chilled and Frozen) .. ..	16,308,799	16,455,958	19,716,458	20,308,694	20,084,745

### § 4. Sheep.

1. **Initiation of the Pastoral Industry.**—Fortunately for Australia, the suitability of its climate and general conditions for the production of a high class of wool were, at an early date in the history of its settlement, surmised and tested by Captain Macarthur, one of the pioneer sheep-breeders of New South Wales. To the energy of this enterprising pastoralist is due in large measure the rapid and extremely satisfactory development of Australia as a producer of fine wool, and, while it would appear that the introduction of the merino sheep into Australia was not due to Macarthur, a great deal of the credit for having successfully established the pastoral industry in Australia must certainly be his.

2. **Distribution throughout Australia.**—With the exception of a short period in the early sixties, when the flocks of Victoria outnumbered those of the mother State, New South Wales has occupied the premier position in sheep-raising, and practically one-half of the sheep of Australia are in this State.

A graph showing the distribution of sheep in Australia during 1938–39 is shown in the Official Year Book No. 34, p. 452. A similar graph showing the distribution of sheep during 1924–25 was published in Official Year Book No. 22, p. 659.

Fluctuations in the number of sheep recorded for each year in Australia from 1860 onwards may be seen from the graph on page 706. Five marked periods of decline depleted the numbers at successive intervals, but these losses were made up rapidly. In every year since 1925 the sheep flocks have exceeded 100 millions, reaching 125,189,129 in 1942, the greatest number recorded in Australia. At no previous period have such large numbers been depastured continuously, and the development has taken place despite an average annual slaughter of approximately nineteen million sheep and lambs for the mutton and lamb trade.

The numbers of sheep in the several States and Territories for each year from 1938 to 1943, are shown in the following table:—

### SHEEP : NUMBER.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	N.T.	A.C.T.	Total.
1938	51,563,181	18,863,467	22,497,970	8,904,402	8,732,076	2,520,950	26,851	263,616	113,372,518
1939	48,876,663	17,007,352	23,158,560	9,936,586	9,177,531	2,625,690	29,901	245,540	111,057,832
1940	54,372,477	18,251,870	21,100,931	9,940,570	9,574,433	2,677,120	38,587	259,408	110,305,391
1941	55,568,000	20,412,362	23,936,090	10,263,123	9,516,272	2,682,375	33,703	281,791	122,604,025
1942	56,737,000	20,598,201	25,196,245	10,245,894	9,722,780	2,398,201	28,245	202,503	125,189,129
1943	56,043,598	19,614,040	25,650,231	10,370,565	10,424,385	2,226,906	34,603	250,344	124,614,672

3. **Proportion in the Several States and Territories.**—Apart from the effect of drought the relative number of sheep depastured in the different States remains fairly constant.

The percentage distribution in 1943 was:—New South Wales, 44.97; Victoria, 15.74; Queensland, 20.58; South Australia, 8.32; Western Australia, 8.37; Tasmania, 1.79; Northern Territory, 0.03; Australian Capital Territory, 0.20 per cent.

4. **Comparison with other Countries.**—As regards the size of its flocks and the quantity and quality of wool produced, Australia has long occupied a leading position amongst the sheep-raising countries of the world. The following figures taken mainly from the *Year Book of the International Institute of Agriculture* represent the latest returns available in regard to the number of sheep in the principal wool-producing countries. The leading position is held by Australia, with 111 million, followed by the U.S.S.R. (Russia) with 85 million, the United States of America with 54 million, the Argentina with 44 million and India (British and Native), 42 million. On account of drought the number of sheep in the Union of South Africa declined from 46 million in 1933 to 36 million in 1935, but the number had increased to 41 million in 1938. In the Argentina sheep flocks also declined from 44.4 million in 1930 to 38 million in 1935, but the number recorded in 1937 was 44 million. During the years 1925 to 1929 the sheep flocks of the U.S.S.R. exceeded those of Australia. The maximum number recorded was 130 million in 1928, but after that year a remarkable decline took place and the number depastured in 1934 was only 46,848,000. It was proposed under the second Five Year Plan to increase the number to 85 million by 1937, but this number was only approximately reached by 1938. Russian sheep are mainly coarse-woolled, and the wool is of inferior quality, but the Soviet Government is making efforts to improve it. In a classification of the wool production in 1934, 10 per cent. was classed as fine wool, 16 per cent. as semi-fine quality, and 74 per cent. as coarse wool. In 1938 the production of fine wool had increased to 14 per cent. and semi-fine to 39 per cent., while the proportion of coarse wool had declined to 47 per cent. Production of wool in the U.S.S.R. amounted to about 303 million lb. during 1938, representing an average weight of fleece shorn of more than 3 lb.

#### SHEEP : NUMBER IN VARIOUS COUNTRIES.

Country.	Year.	No. of Sheep (,000 omitted).	Country.	Year.	No. of Sheep (,000 omitted).
Australia ..	1939	111,058	Italy ..	1938	9,467
U.S.S.R. (Russia) ..	1938	84,500	Bulgaria ..	1934	8,840
U.S.A. ..	1938	53,762	Greece ..	1937	8,451
Argentina ..	1937	43,740	Algeria ..	1937	5,965
India (British and Native) ..	1936	42,060	Chile ..	1936	5,749
Union of South Africa	1938	41,150	Germany ..	1938	5,677
New Zealand ..	1938	32,379	Iraq ..	1938	5,514
United Kingdom ..	1938	26,775	Bolivia ..	1931	5,232
China ..	1935	20,957	Mexico ..	1930	3,674
Spain ..	1933	19,093	Canada ..	1938	3,415
Uruguay ..	1932	17,931	Poland ..	1938	3,411
Turkey ..	1937	16,449	Tunis ..	1937	3,383
Iran ..	1936	13,615	Portugal ..	1934	3,274
Brazil ..	1935	12,645	Kenya ..	1930	3,243
Rumania ..	1937	12,372	Eire ..	1938	3,197
Peru ..	1929	11,209	Somaliland ..	1938	3,000
French Equatorial and West Africa	1937	11,014	Sudan (Anglo-Egyptian) ..	1938	2,500
French Morocco ..	1938	10,162	Syria and Lebanon	1938	2,129
Yugoslavia ..	1938	10,137	Manchuria ..	1937	1,966
France ..	1938	9,872	Nigeria ..	1938	1,796
			Tanganyika Territory	1937	1,646

5. **Oversea Imports and Exports of Sheep.**—As in the case of cattle, the oversea exports of live sheep from Australia are of comparatively little importance. During the last five years the principal consignments of ordinary sheep have been made to Malaya (British) from Western Australia. On 27th November, 1929, the export of stud sheep was prohibited, except with the approval of the Minister for Trade and Customs. Stud sheep, however, were being exported in increasing numbers up to the outbreak of war in the Pacific, and shipments in 1939-40 amounted to 23,329 sheep valued at £70,955 compared with 115 valued at £2,591 in 1942-43. The chief countries to which sheep were consigned in 1939-40 were New Zealand, South Africa, Japan and Korea. The ordinary flock sheep exported from Australia were, for the most part, consigned to Malaya and the Pacific Islands. The following table shows the imports and exports of stud and flock sheep for the years 1938-39 to 1942-43 :—

**SHEEP : IMPORTS AND EXPORTS, AUSTRALIA.**

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
		£A.		£A.		£A.
1938-39 ..	5,288	44,961	72,027	84,366	66,739	39,405
1939-40 ..	6,990	54,088	79,375	112,596	72,385	58,508
1940-41 ..	1,944	12,678	88,209	99,550	86,265	86,872
1941-42 ..	311	4,931	65,061	54,211	64,750	49,280
1942-43 ..	158	2,826	5,265	9,095	5,107	6,269

6. **Sheep Slaughtered.**—The number of sheep slaughtered in the several States during each of the years from 1938 to 1942 were as follows :—

**SHEEP (INCLUDING LAMBS) SLAUGHTERED.**

Year.	N.S.W. (a)	Victoria. (b)	Q'land.	S. Aust.	W. Aust.	Tas. (b)	N.T.	A.C.T. (b)	Total.
1938..	6,322,338	7,727,774	1,120,783	2,007,312	1,318,249	376,583	250	26,222	18,899,511
1939..	6,900,294	6,990,746	1,232,477	2,094,202	1,301,418	460,957	360	25,748	19,006,202
1940..	8,167,695	8,373,177	1,274,584	2,164,288	1,331,580	477,475	2,126	30,993	21,821,918
1941..	8,128,461	8,634,609	1,499,315	2,070,490	1,333,294	552,087	2,000	38,011	22,258,267
1942..	9,279,729	9,730,820	2,088,650	2,296,659	1,530,793	602,949	2,000	41,668	25,573,268

(a) Year ended 31st March, year following.

(b) Year ended 30th June, year following.

7. **Production and Consumption of Mutton and Lamb.**—The production of mutton and lamb during 1942-43 amounted to 940,622,000 lb., of which 713,840,000 lb. or 76 per cent. was consumed locally, leaving a balance of 226,782,000 lb. or 24 per cent. for exportation. (See also § 1 par. 10.)

8. **Exports of Frozen Mutton and Lamb.**—The export trade in mutton and lamb preserved by cold process expanded rapidly to 1913 when 205 million lb. were shipped. Progress was interrupted during the War of 1914-19, and probably owing to high wool prices the exports of mutton and lamb for a number of years after that war were considerably less than earlier shipments. Exports commenced to rise again in 1929-30, and from that year onwards they have continued to expand almost uninterruptedly. Formerly the shipments consisted largely of frozen mutton, but in 1923-24 lamb supplanted mutton, and the exports of lamb have been responsible for the increase in shipments of mutton and lamb during the past ten years.

The quantity and value of the shipments of mutton and lamb during each of the five years ended 1942-43 were as follows :—Lamb, 1938-39, 158,332,714 lb., £4,393,773 ;



1939-40, 201,039,375 lb., £5,353,874; 1940-41, 219,954,539 lb., £5,864,519; 1941-42, 164,300,962 lb., £4,498,081; and 1942-43, 184,240,389 lb., £5,182,558. Mutton, 1938-39, 28,155,757 lb., £413,693; 1939-40, 47,627,848 lb., £728,510; 1940-41, 18,970,895 lb., £277,964; 1941-42, 10,638,918 lb., £172,712; 1942-43, 19,441,131 lb., £313,328.

As with beef, the principal customer in this trade is the United Kingdom, which absorbed 98 per cent. of the total quantity exported from Australia during 1942-43.

9. War-time Contract.—The Government of the United Kingdom has contracted to purchase Australian mutton and lamb. Particulars will be found in Chapter XXVII. "Miscellaneous".

10. Resolutions at Ottawa Conference.—Reference has already been made to the agreement reached at the Imperial Economic Conference at Ottawa regarding the regulation of imports of meat into the United Kingdom. (See § 3 par. 9.)

11. Imports of Frozen Mutton and Lamb into the United Kingdom.—The quantities and values of frozen mutton and lamb imported into the United Kingdom from various countries for the five years ended 1939 are given in the following table. Particulars for later years are not available.

#### IMPORTS OF FROZEN MUTTON AND LAMB INTO THE UNITED KINGDOM.

Country of Origin.	1935.	1936.	1937.	1938.	1939.
<b>MUTTON—QUANTITY.</b>					
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
Chile .. .. .	89,326	95,759	94,201	96,594	58,790
Uruguay .. .. .	6,232	8,240	16,553	23,713	11,893
Argentina .. .. .	150,423	121,908	110,907	98,884	104,664
Other Foreign Countries ..	2,870	2,063	4,871	1,424	1,846
Total, Foreign ..	248,851	227,970	226,532	220,615	177,193
Australia .. .. .	424,050	227,097	405,929	367,044	322,908
New Zealand .. .. .	1,041,563	888,864	862,182	1,014,652	815,912
Other British Countries ..	..	350	4,582	2,605	18,620
Total, British ..	1,465,613	1,116,311	1,272,693	1,384,301	1,157,440
Grand Total ..	1,714,464	1,344,281	1,499,225	1,604,916	1,334,633

#### MUTTON—VALUE.

	£	£	£	£	£
Chile .. .. .	129,856	177,128	163,122	166,009	100,978
Uruguay .. .. .	10,635	13,945	28,128	43,859	20,527
Argentina .. .. .	223,070	219,406	202,384	192,254	185,299
Other Foreign Countries ..	3,984	3,204	8,762	2,500	3,175
Total, Foreign ..	367,545	413,683	402,396	404,622	309,979
Australia .. .. .	693,878	421,720	727,408	622,648	490,512
New Zealand .. .. .	1,754,720	1,616,742	1,638,107	1,779,019	1,291,327
Other British Countries ..	..	613	8,482	4,194	37,242
Total, British ..	2,448,598	2,039,075	2,373,997	2,405,861	1,819,081
Grand Total ..	2,816,143	2,452,758	2,776,393	2,810,483	2,129,060

IMPORTS OF FROZEN MUTTON AND LAMB INTO THE UNITED KINGDOM—  
*continued.*

Country of Origin.	1935.	1936.	1937.	1938.	1939.
LAMB—QUANTITY.					
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
Chile .. .. .	118,554	111,209	115,682	99,199	137,256
Uruguay .. ..	130,176	118,055	148,876	147,637	165,215
Argentina .. ..	754,827	777,996	778,943	794,712	817,656
Other Foreign Countries ..	28,561	37,230	38,006	42,947	32,048
Total, Foreign ..	1,032,118	1,044,490	1,081,507	1,084,495	1,152,175
Australia .. ..	1,360,158	1,268,909	1,476,615	1,531,232	1,305,702
New Zealand .. ..	2,591,399	2,641,494	2,740,202	2,660,882	2,736,479
Other British Countries ..	18	558	4,174	7,312	5,759
Total, British ..	3,951,575	3,910,961	4,220,991	4,199,426	4,047,940
Grand Total ..	4,983,693	4,955,451	5,302,498	5,283,921	5,200,115
LAMB—VALUE.					
	£	£	£	£	£
Chile .. .. .	271,858	316,386	312,972	287,386	350,924
Uruguay .. ..	327,257	316,870	419,469	411,710	442,169
Argentina .. ..	1,898,688	2,091,387	2,179,470	2,250,955	2,203,637
Other Foreign Countries ..	77,642	101,194	108,090	113,239	87,004
Total, Foreign ..	2,575,445	2,825,837	3,020,001	3,063,290	3,083,734
Australia .. ..	3,934,693	3,698,058	4,349,418	4,571,384	3,647,984
New Zealand .. ..	8,063,996	8,264,409	8,753,793	8,743,507	8,441,400
Other British Countries ..	51	1,529	11,704	17,831	16,673
Total, British ..	11,998,740	11,963,996	13,114,915	13,332,722	12,106,057
Grand Total ..	14,574,185	14,789,833	16,134,916	16,396,012	15,189,791

### § 5. Wool.

1. General.—Australia is the leading wool-growing country in the world. With less than one-sixth of the world's sheep Australia produces one-quarter of the world's supply. Moreover, half of the world's production of fine-quality merino wool is produced in Australia. The bulk of the production is exported, but with the greater activity of Australian woollen mills the quantity used locally is increasing; the amount so used represented 13 per cent. of the total production in 1942-43.

The important position held by Australia among the principal sheep and wool producing countries of the world is more clearly shown in the following table :—

### SHEEP AND WOOL : PRINCIPAL PRODUCING COUNTRIES.

Country.	Year.	No. of Sheep (in millions).	Wool Production (in millions of lb., greasy).
<b>Australia</b> .. ..	<b>1938-39</b>	<b>111.1</b>	<b>984</b>
United States of America ..	1938-39	53.7	458
Argentina .. ..	1937-38	43.7	389
New Zealand .. ..	1938-39	32.4	329
U.S.S.R. (Russia) .. ..	1938-39	84.5	303
Union of South Africa ..	1938-39	41.2	264

2. **Greasy and Scoured Wool.**—Whether the weight of the wool clip should be stated as “ in the grease ” or as “ scoured and washed ” is a matter which seriously affects comparisons between the clips of different seasons and of different countries. The quantity of grease and other extraneous matter in a fleece differs, not only between countries, but between districts in the same country. It fluctuates with the vagaries of the season, and with the breed and the condition of the sheep. There is, moreover, no clearly defined standard in regard to the cleanliness of wool described as scoured and washed.

A committee of experts in a report to the Central Wool Committee estimated in 1940 that the clean scoured wool content of the total production of Australia averaged between 51 and 53 per cent. of its greasy weight.

Wool scoured in Australia by wool-scouring works, however, yields only about 46 per cent. because the grade of greasy wool treated locally for export as scoured includes a large proportion of dirty and low-grade wool.

The quantity of scoured and washed Australian wool exported during the five years ended 1942-43 was approximately 15 per cent. of the total wool exports regarded as “ greasy ”.

3. **Production.**—The bulk of the Australian wool production is shorn from live sheep. Approximately 6 per cent. is obtained by fellmongering and about 5 per cent. is on skins exported. Statistics of wool production are compiled from data received from growers, fellmongers, etc. The following table gives the production for each of the last five seasons. Particulars of the gross value of wool produced in Australia are also shown; these values are based upon the average price of greasy wool realized at auction in the principal markets of Australia. The gross value for 1939-40 to 1942-43 is based upon the average appraised value plus certain adjustments as computed by the State Statisticians.

### WOOL : TOTAL PRODUCTION.

State.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	lb.	lb.	lb.	lb.	lb.
New South Wales(b)	439,049,939	548,505,998	539,035,404	549,203,170	499,443,158
Victoria ..	105,829,182	179,125,526	187,831,364	212,919,041	212,325,163
Queensland(c)	179,458,589	195,770,277	214,704,450	204,119,026	213,906,182
South Australia ..	102,888,121	105,265,809	106,646,992	105,124,013	108,637,004
Western Australia(c)	78,802,143	80,657,367	76,170,000	78,500,000	90,231,000
Tasmania ..	17,519,000	18,334,000	17,078,157	16,985,404	17,256,000
Northern Territory	(d)35,000	(d)35,000	308,128	308,000	308,000
Total—Quantity	983,581,974	1,127,694,037	1,141,774,495	1,167,158,654	1,151,166,507
	£	£	£	£	£
Value..	42,042,734	61,759,180	63,014,009	64,701,719	(a) 73,016,917

(a) Subject to revision.  
previous December.

(b) Includes Australian Capital Territory.

(c) For year ended  
(d) Approximate.

(c) For year ended



4. **Care Needed in Comparing Clips.**—In comparing successive clips allowance must be made for the circumstance that, owing to climatic or other conditions, the time of shearing may be so far delayed in some areas that one clip may include almost thirteen months' growth of wool, while the succeeding one may include little more than eleven months' growth.

5. **World's Wool Production.**—The following table gives details of the world's wool production at the latest available date and shows the importance of Australia as a wool-producing country. Of a total production of 3,991 million lb. in 1938-39, Australia produced 984 million lb., or 24.7 per cent. It is also interesting to note that the share of the British Empire in world production during the same year was estimated at 1,849 million lb., or 46.3 per cent.

### WOOL : WORLD'S PRODUCTION.

(In millions of lb., "greasy" basis.)

Countries.	Average Five Years 1909-13.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
<b>Australia</b> .. ..	<b>741.4</b>	<b>1,015.4</b>	<b>971.1</b>	<b>982.8</b>	<b>1,023.4</b>	<b>983.6</b>
U.S.A. .. ..	314.1	451.0	452.7	448.6	454.6	457.7
Argentina .. ..	358.7	370.0	359.0	379.0	380.0	394.0
New Zealand .. ..	198.5	265.0	304.0	303.5	297.0	329.0
U.S.S.R. (Russia) ..	380.0	128.0	158.4	202.1	259.0	303.0
Union of South Africa	165.9	219.0	250.0	277.0	246.0	264.0
Uruguay .. ..	157.0	112.0	110.0	114.0	110.0	114.0
China (a) .. ..	100.0	110.0	110.0	110.0	110.0	110.0
United Kingdom ..	134.0	115.0	109.0	108.0	107.0	110.0
India (a) .. ..	100.0	100.0	100.0	100.0	100.0	100.0
Turkey .. ..	118.0	35.4	41.1	48.9	64.5	69.0
Spain .. ..	72.0	73.0	66.0	66.0	60.0	60.0
France .. ..	80.7	52.8	52.7	53.9	55.1	54.4
Rumania .. ..	13.2	43.0	42.9	42.9	45.0	48.5
Morocco (French) ..	14.9	35.6	40.8	40.7	47.8	44.7
Germany .. ..	52.0	32.2	36.3	40.1	43.3	44.5
Brazil .. ..	35.0	36.4	37.5	37.5	43.2	(a) 43.0
Iran .. ..	12.1	40.0	37.5	37.5	35.3	40.0
Yugoslavia .. ..	25.4	31.0	32.2	33.6	31.5	35.5
Chile .. ..	17.4	37.0	35.2	35.7	36.0	33.0
Italy .. ..	55.0	36.0	30.0	30.0	30.0	33.0
Bulgaria .. ..	23.7	21.3	21.1	20.4	20.7	21.2
Canada .. ..	11.2	19.5	19.4	18.9	19.0	18.8
Eire .. ..	..	17.0	16.5	17.6	16.4	17.9
Algeria .. ..	35.2	15.2	16.1	17.6	17.2	16.4
Basutoland .. ..	..	5.1	7.3	6.0	4.7	6.9
Falkland Islands ..	..	4.0	4.2	4.0	4.6	3.6
Other Countries ..	71.2	201.4	214.0	222.3	215.9	234.8
<b>Total</b> .. ..	<b>3,286.6</b>	<b>3,621.3</b>	<b>3,675.0</b>	<b>3,798.6</b>	<b>3,877.2</b>	<b>3,990.5</b>

(a) Estimated.

6. **War-time Contracts.**—(i) *Wool.* After the outbreak of war in September, 1939, negotiations were concluded between the Governments of the Commonwealth and of the United Kingdom whereby the latter contracted to purchase the entire wool clip of Australia for the duration of the War and one full clip thereafter. The price per lb. at store in Australia was fixed at 10½d. sterling, or 13.4375d. in Australian currency for the 1939-40 to 1941-42 clips. For the 1942-43 and later clips the United Kingdom

Government increased the price by 15 per cent., thus bringing the price to 15.453125d. Australian currency, and provision was made for an equal division between the two Governments of any profits derived from the sale of the wool for use outside the United Kingdom. In addition, an amount not exceeding 3d. sterling or 3d. (Aust.) will be paid by the United Kingdom Government to cover all costs from store at port of oversea shipment to ship. The agreement provides that sufficient quantities of wool shall be retained in Australia for domestic use. The administration of the scheme in Australia is controlled by the Central Wool Committee assisted by a Committee in each State. These Committees consist of representatives of growers, brokers, buyers and manufacturers.

Separate agreements have been negotiated by the Governments of the United Kingdom, Union of South Africa and New Zealand.

(ii) *Sheepskins.* Under the contract negotiated in April, 1940, between the Governments of the Commonwealth and of the United Kingdom, the latter agreed to purchase the exportable surplus of Australian woolled sheepskins. The scheme, which is for the same period as the wool contract, is administered by the Central Wool Committee. The exportable surplus is determined by competition in the open market between fellmongers and export packers licensed by the Central Wool Committee. The quantity appraised during the period of operation for the season 1942-43 amounted to 7,794,507 skins with an appraised value of £1,692,955.

Further particulars of these contracts appear in Chapter XXVII. "Miscellaneous".

7. *Wool Appraisements.*—Details of the quantity and value of wool appraised by the Central Wool Committee during 1939-40 to 1942-43 are given in the following table. The quantities include the production for the years shown plus any unappraised wools carried forward.

#### WOOL APPRAISEMENTS : AUSTRALIA.

Year ended June—	Greasy.		Scoured.		Total Appraised Value.	Average Value per lb. Greasy.
	Quantity.	Appraised Value.	Quantity.	Appraised Value.		
	lb.	£	lb.	£	£	d.
1940 (a)	1,066,236,666	55,880,334	45,828,781	3,961,945	59,842,279	12.403
1941 ..	990,833,406	50,519,740	53,205,679	4,731,411	55,251,151	12.085
1942 ..	1,034,617,098	53,681,110	55,853,495	4,790,795	58,471,905	12.242
1943 ..	1,048,049,364	61,686,427	51,369,110	4,990,608	66,677,035	13.906

(a) Period September, 1939—June, 1940.

8. *Consumption of Locally Processed Wool.*—It is impossible to obtain particulars of the total consumption of wool in Australia, as considerable quantities of manufactured woollen goods are imported. It is possible, however, to secure with reasonable accuracy the quantities of wool used in Australian factories and mills to produce woollen cloth and other woollen goods, such as blankets, rugs and knitted-wear. Some difficulties arise in the aggregation of returns from individual mills concerned with only one process in manufacture and whose output constitutes the raw material of other mills, but the risk of duplication has been reduced to a minimum. Reference is made to the woollen mills established in Australia in Chapter XIX. "Manufacturing Industry".

The factors used to convert scoured wool and woollen yarn processed in Australia into their greasy equivalent are now computed from the data furnished by woollen mills. In 1939-40 these factors were :—1 lb. of worsted yarn was taken to equal 2.45 lb. of greasy while the greasy equivalent of 1 lb. of scoured wool was 1.94 lb.

In the following table particulars are given of the quantity of wool processed in Australian factories during each of the past ten years.

### CONSUMPTION OF LOCALLY PROCESSED WOOL IN AUSTRALIA.

(In terms of greasy.)

Year.			Quantity.	Year.			Quantity.
			lb.				lb.
1933-34	..	..	60,881,494	1938-39	..	..	68,444,311
1934-35	..	..	55,753,478	1939-40	..	..	84,265,244
1935-36	..	..	70,205,840	1940-41	..	..	101,517,826
1936-37	..	..	71,579,920	1941-42	..	..	123,482,786
1937-38	..	..	68,377,043	1942-43	..	..	121,747,310

9. Exports of Wool.—(i) *Greasy—Quantities.* Of the total weight of greasy wool shipped overseas during the five years ended 1942-43, 42 per cent. was sent to the United Kingdom, compared with 38 per cent. dispatched during the years 1909 to 1913. The other leading consignees during the same period were United States of America, 45 per cent.; France, 6 per cent.; and Japan, 5 per cent. The following table shows the quantities of greasy wool exported, and the principal countries of recorded destination.

### EXPORTS OF WOOL IN THE GREASE : AUSTRALIA.

Country to which Exported.	Average Five Years 1909-13.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	lb.	lb.	lb.	lb.	lb.	lb.
United Kingdom	212,004,088	333,263,937	539,690,858	146,331,337	198,764,867	173,255,770
Other British Countries	(a)	2,801,427	0,765,227	5,052,015	6,734,575	13,989,494
Belgium	55,143,706	104,147,161	10,436,368	..	..	..
France	149,835,946	162,034,076	153,310,149	..	..	..
Germany	106,344,696	35,027,760	4,461,767	..	..	..
Italy	4,381,197	21,186,890	3,018,449	..	..	..
Japan	7,262,683	72,659,411	50,611,467	58,100,837	11,324,899	..
Netherlands	(a)	15,701,733	5,341,198	..	..	..
Poland	(a)	6,954,917	466,805	..	..	..
United States of America	15,486,447	21,481,584	16,257,000	275,624,137	512,992,800	328,200,808
Other Foreign Countries	6,382,577	20,406,016	4,544,335	5,171,186	6,527,883	2,681,473
Total ..	556,841,340	795,727,712	794,904,223	490,880,112	736,345,024	518,127,551

(a) Included with Other Foreign Countries.

(ii) *Scoured and Washed including Tops, Noils and Waste—Quantities.* The exports of "scoured and washed" wool including tops, noils and waste during the period shown were as follows:—

### EXPORTS OF WOOL—SCOURED AND WASHED, INCLUDING TOPS, NOILS AND WASTE : AUSTRALIA.

Country to which Exported.	Average Five Years 1909-13.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	lb.	lb.	lb.	lb.	lb.	lb.
United Kingdom	32,032,577	36,591,488	53,994,278	38,516,576	24,037,302	11,980,449
Canada	(a)	4,170,367	7,874,302	8,604,416	8,700,828	4,884,407
Other British Countries	(a)	1,156,535	2,595,559	3,905,218	6,969,753	6,090,509
Belgium	7,528,058	5,802,183	769,722	..	..	..
France	16,068,910	9,960,450	6,473,630	..	..	..
Germany	12,310,967	1,935,088	330,755	..	..	..
Italy	265,442	67,051	16,839	..	..	..
Japan	1,888,161	1,618,827	1,575,750	165,652	19,611	..
Poland	(a)	497,285	74,667	..	..	..
Other Foreign Countries	252,995	8,845,890	4,281,436	9,013,065	53,061,696	28,707,734
Total ..	70,347,110	70,945,164	77,986,938	60,354,927	92,789,190	51,669,159

(a) Included with Other Foreign Countries.



(iii) *Total Value of Exports.* The value of wool exported from Australia during the five years ended 1942-43 averaged 35 per cent. of the value of the exports of merchandise of local origin, and during 1942-43 the proportion was 36 per cent. The value during the period under review together with the principal countries to which wool was exported is shown in the following table:—

### VALUE OF WOOL EXPORTS : AUSTRALIA.

Country to which Exported.	Average Five Years 1909-13.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	£A.	£A.	£A.	£A.	£A.	£A.
United Kingdom ..	10,608,967	18,513,175	38,703,877	13,527,483	15,399,458	13,593,272
Other British Countries	(a)	675,143	1,715,647	2,189,392	2,636,965	2,898,651
Belgium ..	2,546,915	4,720,537	594,395	..	..	..
France ..	6,494,832	7,566,458	10,135,008	..	..	..
Germany ..	5,131,282	1,994,320	244,540	..	..	..
Italy ..	202,434	1,175,304	174,384	..	..	..
Japan ..	516,528	3,804,120	3,196,178	3,918,906	737,464	..
Netherlands ..	(a)	826,198	265,014	..	..	..
Poland ..	(a)	403,446	27,077	..	..	..
United States of America	795,328	1,346,187	1,153,378	19,060,182	38,193,388	27,141,701
Other Foreign Countries	296,356	1,712,208	693,346	949,573	1,073,838	684,564
Total ..	26,592,642	42,737,096	56,902,844	39,645,536	58,041,113	44,318,188

(a) Included with Other Foreign Countries.

10. *Exports and Local Sales of Wool.*—Approximately 90 per cent. of Australian wool is normally disposed of locally. Under pre-war conditions buyers from the United Kingdom, France, Belgium, Germany and other European countries, and from America, Japan, China and India attended the sales conducted in Sydney, Albury, Melbourne, Geelong, Ballarat, Brisbane, Adelaide, Perth, Hobart and Launceston. Particulars regarding exports and local sales, as well as quantities and proportions of the various descriptions of wool marketed in each State, will be found in the *Production Bulletin*, Part II., issued by this Bureau.

11. *Value.*—Wool is the chief factor in the pastoral wealth of Australia, and the nation's prosperity is largely dependent upon the satisfactory sale of the clip. During the ten years ended 1938-39, the price of greasy wool sold in the selling centres of Australia averaged 11½d. per lb. compared with 13.68d. per lb. for the ten years ended 1942-43. This figure may be compared with an average of 18d. per lb. during the nine post-war years ended 1928-29, and 9d. per lb. for the seven pre-war years ended 1913-14. The heavy decline in the price of wool which commenced in 1929-30 continued during the succeeding three years. In 1933-34, prices rose in a remarkable manner, averaging 15.84d. per lb., compared with 8.72d. per lb. for the previous year, an increase of 81.6 per cent. A decline in 1934-35 was succeeded by a period of rising prices in the two years following, but in 1937-38 and in 1938-39 prices again receded.

As mentioned in paragraph 6 above, the price of wool is now determined by the British Government wool contract. The price as fixed for the years 1939-40 to 1941-42, was 13.4375d. per lb., and for the year 1942-43 the price was 15.45d. per lb.

The effect of fluctuating wool values upon the national income is reflected in the following figures. Based upon appraisement in each State plus certain adjustments as recorded by the State Statisticians, the gross value of the wool clip for Australia for 1941-42 amounted to £64,702,000 compared with £42,043,000 realized during 1938-39 under open market conditions. These values may be compared with £81,430,000 in 1924-25 when the record price was realized, and £34,804,000 in the year 1930-31.

The following table gives the average auction-room price in Australia of greasy wool as compiled by the National Council of Wool-selling Brokers. This price represents the average price realized for all greasy wool of whatever type or quality marketed during the years indicated.

### WOOL : AVERAGE MARKET PRICE PER LB.

Description.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	d.	d.	d.	d.	d.
Greasy (a) .. ..	10.39	(b)13.44	(b)13.44	(b)13.44	(c)15.45

(a) National Council of Wool-selling Brokers.

(b) The equivalent of the contract price of 10½d. sterling.

(c) The equivalent of the contract price of 12.34d. sterling.

Measured in terms of Australian, sterling and gold currencies the approximate values of greasy wool per lb. since 1933-34 were as follows:—

### GREASY WOOL : AVERAGE VALUES PER LB.

Year.	Australian Currency.	Sterling.	Gold Prices.
	d.	d.	d.
1933-34 .. ..	15.84	12.65	8.19
1934-35 .. ..	9.75	7.78	4.68
1935-36 .. ..	14.01	11.19	6.79
1936-37 .. ..	16.48	13.16	8.03
1937-38 .. ..	12.51	9.99	6.15
1938-39 .. ..	10.39	8.30	4.84
1939-40 .. ..	13.44	10.75	5.37
1940-41 .. ..	13.44	10.75	5.34
1941-42 .. ..	13.44	10.75	5.34
1942-43 .. ..	15.45	12.34	6.14

The average values shown in sterling and gold currencies have been calculated by converting the average prices shown in Australian currency on the basis of the average rates of exchange between the months of September and June in each year. Though not exact these results will suffice for general purposes.

12. United Kingdom Importation of Wool.—The appended statement of the quantities and values of wool imported into the United Kingdom during 1939 from the principal wool-producing countries shows the important position which Australia occupies in the supply of wool to the Mother Country. Particulars for later years are not available.

### WOOL (a) : IMPORTS INTO UNITED KINGDOM, 1939.

Country of Origin.	Quantity.	Value.	Country of Origin.	Quantity.	Value.
	lb.	£		lb.	£
Australia ..	355,078,400	16,734,633	Other British Possessions ..	3,043,500	108,765
New Zealand ..	223,794,300	9,573,230	Peru ..	1,487,700	75,412
Argentina ..	112,401,500	3,980,130	Belgium ..	4,560,000	303,471
Union of South Africa ..	85,130,000	3,054,049	Falkland Islands ..	3,116,300	119,058
India ..	48,136,800	1,748,059	Germany ..	301,500	11,315
France ..	25,735,900	1,393,451	U.S.A. ..	414,900	16,465
Uruguay ..	11,926,500	540,552	Other Countries ..	5,243,500	193,973
Chile ..	11,564,800	481,492			
Eire ..	8,622,000	341,983	Total ..	900,557,600	38,676,038

(a) Greasy and Scoured.

Of the importations of wool into the United Kingdom during 1939, Australian wool represented 40 per cent. of quantity and 43 per cent. of value, and New Zealand 25 per cent. of quantity and 25 per cent. of value. Altogether, 726,921,300 lb., valued at £31,679,777, were received from British Possessions, these figures being equivalent to 81 per cent. of the total weight and 82 per cent. of the total value of all wool imported.

13. **Principal Importing Countries and Sources of Supply.**—The following table furnishes, in respect of the principal importing countries, details of their production and imports of wool for 1938, together with the chief sources of supply. The quantities imported refer to the actual weight of wool without distinguishing between greasy and scoured. They also exclude any wool imported on skins. Later details are not available.

### WOOL : PRINCIPAL IMPORTING COUNTRIES AND SOURCES OF SUPPLY, 1938.

(In millions of lb.)

Importing Country.	Production(a) of Importing Country.	Quantity imported from—					Total Imports.
		Australia.	Union of South Africa.	Argentina.	New Zealand.	Other Countries.	
United Kingdom ..	110.0	365	107	79	198	132	881
Belgium ..	0.7	106	19	20	7	65	217
Czechoslovakia ..	2.0	18	4	6	..	1	29
France ..	54.4	168	52	62	22	86	390
Germany ..	44.5	49	90	56	14	97	306
Italy ..	33.0	19	22	12	..	23	76
Japan ..	..	87	5	6	11	8	117
Poland ..	13.9	11	2	14	4	..	34
U.S.A. ..	457.7	7	1	47	4	44	103
Total ..	..	833	302	302	260	456	2,153

(a) As in the grease.

As a considerable transit trade exists between continental countries, it must not be assumed that the whole of the imports recorded by these countries are retained for their own consumption. The countries chiefly concerned with the transit trade are United Kingdom, Belgium, and France. The quantities re-exported during 1938 were:—United Kingdom, 269 million lb., or 30 per cent., of the total imports; Belgium, 76 million lb., or 35 per cent.; and France, 49 million lb., or 13 per cent.

14. **Inquiry into Wool Industry.**—A Committee was appointed by the Commonwealth Government on 15th August, 1932, to inquire into and report on the condition of the Australian wool industry. The report of the Committee was presented on 24th November, 1932. The inquiry covered costs of production, prices, etc., and recommendations were made for the rehabilitation of the industry. For fuller details see Official Year Book No. 29, p. 644.

## § 6. Trade in Hides and Skins.

1. **Extent of Trade.**—In addition to the hides and skins treated locally, considerable quantities are exported: the value of cattle and horse hides, and sheep and other skins sent overseas during the five years ended 1942-43 amounted to £22,079,093, or an average of £4,415,819 per annum.



2. **Sheepskins with Wool.**—The exports of sheepskins with wool aggregating £8,254,009 during the last five years constitute an important item in the values referred to in the preceding paragraph, although the largest export in the last quinquennium was that of rabbit skins valued at £8,902,957. During 1938-39 France was the largest purchaser, taking 74 per cent. of the total consignments, while the United Kingdom ranked next with 15 per cent., followed by Germany with 7 per cent. The exports of sheepskins with wool during each of the years from 1938-39 to 1942-43 were as follows :—

## EXPORTS OF SHEEPSKINS WITH WOOL : AUSTRALIA.

Particulars.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
Number ..	12,625,200	9,242,953	3,267,519	8,442,352	4,616,761
Value .. £A.	2,301,800	2,267,779	850,070	1,755,419	1,078,941

3. **Sheepskins without Wool.**—Sheepskins without wool are exported chiefly to the United States of America. During 1942-43 this country accounted for 97 per cent. of the total shipments while the remaining 3 per cent. was exported to the United Kingdom. Quantities and values for the last five years are given in the table hereunder :—

## EXPORTS OF SHEEPSKINS WITHOUT WOOL : AUSTRALIA.

Particulars.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
Number ..	1,075,895	1,463,610	2,013,651	4,922,932	3,642,179
Value .. £A.	68,152	101,027	127,666	385,194	307,477

4. **Hides.**—(i) *Exports.* The export trade in cattle hides during 1942-43 was distributed as follows :—United Kingdom, £10,255 ; Canada, £1,150 ; United States of America, £40,151.

The exports during the last five years are given in the table below :—

## EXPORTS OF CATTLE HIDES : AUSTRALIA.

Particulars.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
Number ..	1,186,543	559,490	496,415	96,672	72,526
Value .. £A.	896,752	579,640	438,648	89,715	49,156

Calfskins exported during the five years ended 1942-43 numbered 1,386,533 valued at £269,589. The annual export of horse hides is very small, and for the past five years numbered 35,571 hides valued at £24,602.



## CHAPTER XXII.

## AGRICULTURAL PRODUCTION.

NOTE.—Except where otherwise stated, the "agricultural" years hereafter mentioned are taken as ending on 30th June.

## § 1. Introductory.

A brief reference to the attempts at cultivation by the first settlers in New South Wales and to the discovery of suitable agricultural land on the Parramatta and Hawkesbury Rivers prior to the year 1813 and west of the Blue Mountains thereafter is contained in early issues of the Official Year Book. (See No. 22, p. 670.)

## § 2. Progress of Agriculture.

1. Early Records.—In an "Account of Live Stock and Ground under Crop in New South Wales, 19th August, 1797", Governor Hunter gives the acreage of crops as follows:—Wheat, 3,361 acres; maize, 1,527 acres; barley, 26 acres; potatoes, 11 acres; and vines, 8 acres.

At a muster taken in 1808 the following was the return of crops:—Wheat, 6,874 acres; maize, 3,389 acres; barley, 544 acres; oats, 92 acres; peas and beans, 100 acres; potatoes, 301 acres; turnips, 13 acres; orchards, 546 acres; and flax and hemp, 37 acres.

By the year 1850 the area of crops had increased to 491,000 acres, of which 198,000 acres were cultivated in what is now the State of New South Wales, and 169,000 acres in Tasmania. At the end of 1850 the area under cultivation in Victoria, which was then the Port Phillip District of New South Wales, was 52,190 acres.

The gold discoveries of 1851 and subsequent years had at first a very disturbing effect on agricultural progress, the area of crops declining from 491,000 acres in 1850 to 458,000 acres in 1854. The demand for agricultural products occasioned by the large influx of population was, however, soon reflected in the increased area cultivated, for at the end of 1858 the land under crop in Australia exceeded a million acres. The largest increase took place in Victoria, which returned an area of 299,000 acres. For the same year South Australia had 264,000 acres in cultivation, Tasmania 229,000 acres, and New South Wales, 223,000 acres.

2. Progress of Cultivation. The following table shows the area of crops in each of the States and Territories of Australia at decennial intervals since 1860 and during each of the last five seasons:—

## AREA OF CROPS.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	N.T.	A.C.T.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1860-1	246,143	387,283	3,353	359,284	24,705	152,860	..	..	1,173,628
1870-1	305,151	692,840	52,210	801,571	54,527	157,410	..	..	2,143,709
1880-1	600,277	1,548,800	113,978	2,087,237	93,902	140,788	..	..	4,560,991
1890-1	852,704	2,031,955	224,993	2,093,515	69,678	157,376	..	..	5,430,221
1900-1	2,446,767	3,114,132	457,397	2,360,680	201,338	224,352	..	..	8,813,666
1910-11	3,386,017	3,952,070	607,113	2,746,334	855,024	286,920	360	..	11,803,838
1920-21	4,465,143	4,480,503	779,497	3,231,033	1,804,987	297,333	296	1,966	15,099,858
1930-31	6,811,247	6,715,660	1,144,216	5,426,075	4,792,017	267,632	1,550	5,419	25,163,816
1938-39	7,019,357	5,019,299	1,734,789	4,724,090	4,719,254	243,048	1,116	6,827	23,407,780
1939-40	6,381,531	5,002,362	1,726,091	4,541,614	4,331,299	258,038	340	8,119	22,249,304
1940-41	6,374,334	4,467,191	1,734,248	4,254,348	4,026,966	253,941	322	6,457	21,117,830
1941-42	5,029,553	4,734,613	1,671,336	3,976,232	3,852,092	280,970	..	5,549	20,450,345
1942-43	5,297,313	3,610,430	1,742,802	3,436,075	2,819,713	300,005	..	6,779	17,419,717

The progress of agriculture was practically uninterrupted from 1860 to 1915-16, when, as the result of a special effort to raise wheat during the War of 1914-19, 18,528,234 acres were cultivated in Australia. Four years later the area of crops declined to 13,296,407 acres owing to the accumulation of wheat stocks consequent upon the difficulty of securing freight space during the war years. After the termination of hostilities the area again began to expand and rose steadily to a new maximum of 25,163,816 acres in 1930-31. Thereafter the slump in wheat prices seriously depressed the agricultural industry and the area of crops receded to just under 20 million acres in



1935-36. Subsequently the area increased, reaching a maximum of 23½ million acres in 1938-39 and thereafter falling to under 17½ million acres in 1942-43. Following the outbreak of war in 1939, the area under crop declined with each successive year. This movement was contrary to the experience of World War I when the decline did not occur until the third war-year.

3. **Artificially-sown Grasses.** In all the States there are considerable areas of artificially-sown grasses mainly sown on cultivated land after burning off the scrub. These areas, which are not included in "area of crops", have expanded from 5½ million acres in 1929-30 to more than 9½ million acres in 1940-41; the latter figure excludes Queensland.

4. **Australian Agricultural Council.**—Arising out of a conference of Commonwealth and State Ministers on agricultural and marketing matters held at Canberra in December, 1934, a permanent organization known as the Australian Agricultural Council was formed. The Council consists of the Commonwealth Minister for Commerce and Agriculture, and the State Ministers of Agriculture, with power to co-opt the services of other Commonwealth and State Ministers as required. The principle functions of the Council are (i) the promotion of the welfare and development of agricultural industries generally; (ii) the improvement of the quality of agricultural products and the maintenance of high grade standards; (iii) to ensure, as far as possible, balance between production and available markets; and (iv) organized marketing, etc.

In addition a permanent technical committee known as the Standing Committee on Agriculture was formed to act in an advisory capacity to the Council and whose functions would be:—(i) to secure co-operation and co-ordination in agricultural research throughout Australia; (ii) to advise the Commonwealth and State Governments, either directly or through the Council, on matters pertaining to the initiation and development of research on agricultural problems; and (iii) to secure co-operation between the Commonwealth and States and between the States in respect to quarantine measures relating to pests and diseases of plants and animals, and to advise the Commonwealth and State Governments. The personnel of this Committee consists of the permanent heads of the State Departments of Agriculture, members of the Executive Committee of the Council for Scientific and Industrial Research, and the Secretary, Department of Commerce and Agriculture. At the meeting of the Australian Agricultural Council held in September, 1942, it was decided to extend the membership of the Standing Committee to include The Department of War Organization of Industry, Directorate of Man Power, the Commonwealth Statistician and the Commonwealth Prices Commissioner. The Director-General of Agriculture was included as a member in February, 1943.

### § 3. Distribution, Production and Value of Crops.

1. **Distribution of Crops.**—The following table gives the areas in the several States and Territories of each of the principal crops for the season 1942-43:—

AREA OF PRINCIPAL CROPS, 1942-43.

Crop.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T. (H)	A.C.T.	Anst.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Wheat (Grain)	3,032,946	2,145,156	334,785	2,009,027	1,753,178	4,128	..	1,125	9,280,345
Oats ..	431,299	428,043	19,103	262,590	342,309	13,159	..	410	1,496,913
Maize ..	103,591	7,131	173,816	..	46	..	..	8	284,592
Barley—									
Malting ..	5,501	62,413	5,762	260,666	19,657	2,399	..	..	356,398
Other ..	8,796	15,429	2,504	37,314	29,845	329	..	..	94,217
Beans and Peas	3,590	13,408	1,346	19,403	8,312	30,595	..	..	76,654
Rye ..	760	4,414	130	12,639	3,642	262	..	18	21,865
Rice ..	34,232	..	..	..	..	..	..	..	34,232
Hay ..	736,157	788,792	70,025	425,505	253,150	82,062	..	3,424	2,359,115
Green Fodder	728,404	103,593	578,452	285,587	351,509	62,751	..	1,516	2,111,819
Grass and other									
Seeds ..	7,590	9,108	54,362	9,096	1,843	1,527	..	..	83,526
Orchards and other Fruit-gardens ..	79,363	69,776	29,029	29,478	21,266	31,337	..	135	260,384

(a) Not available.

## AREA OF PRINCIPAL CROPS, 1942-43—continued.

Crop.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T. (a)	A.C.T.	Aust.
Vines—	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Productive ..	15,373	41,207	2,553	56,238	8,924	..	..	2	124,297
Unproductive ..	929	1,427	487	1,964	1,202	..	..	1	6,010
Market-gardens	34,881	19,378	9,769	4,268	3,241	1,247	..	22	72,806
Sugar-cane—									
Productive ..	9,732	..	231,256	..	..	..	..	..	240,988
Unproductive ..	9,197	..	78,866	..	..	..	..	..	88,063
Potatoes ..	24,488	51,757	9,885	7,233	6,399	40,383	..	64	140,209
Onions ..	1,096	5,741	1,843	495	400	133	..	8	9,716
Other Root Crops	12,438	8,949	7,623	2,168	1,232	15,214	..	35	47,659
Tobacco ..	823	1,850	3,149	..	1,347	..	..	..	7,169
Broom Millet ..	946	488	140	..	..	..	..	..	1,574
Pumpkins and									
Melons ..	7,390	3,398	42,075	1,365	1,660	49	..	7	55,944
Hops ..	..	148	..	..	23	1,143	..	..	1,314
Cotton ..	..	..	56,433	..	..	..	..	..	56,433
All other Crops	7,791	34,819	29,409	11,639	10,528	13,287	..	2	107,475
Total Area ..	5,297,313	3,816,430	1,742,802	3,436,675	2,819,713	300,005	..	6,779	17,419,717

(a) Not available.

2. **Relative Areas of Crops in States and Territories.**—The proportion of each of the crops cultivated to the extent of over 100,000 acres in the various States and Territories on the total area of crops for the season 1942-43 is shown in the next table. In four of the States, namely, New South Wales, Victoria, South Australia and Western Australia, wheat-growing for grain is by far the most extensive. In Queensland the most extensive crops are green forage, wheat, sugar-cane and maize, and in Tasmania hay, green fodder, potatoes, orchards and fruit-gardens, and oats occupy the greatest area.

As pointed out previously wheat is the main crop in Australia, the area thereof for grain only representing 53 per cent. of the total area of crops in 1942-43.

## RELATIVE AREAS UNDER CROP, 1942-43.

Crop.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T. (a)	A.C.T.	Aust.
	%	%	%	%	%	%	%	%	%
Wheat ..	57.26	56.23	19.21	58.46	62.18	1.38	..	16.60	53.28
Hay ..	13.90	20.67	4.02	12.38	8.98	27.35	..	50.51	13.54
Oats ..	8.14	11.22	1.10	7.64	12.14	4.39	..	6.05	8.60
Green									
Fodder..	13.75	2.72	33.19	8.31	12.47	20.92	..	22.39	12.12
Barley ..	0.27	2.04	0.47	8.67	1.70	0.91	..	..	2.59
Sugar-cane	0.36	..	17.79	..	..	..	..	..	1.89
Maize ..	1.95	0.19	9.97	..	..	..	..	0.12	1.64
Orchards									
and Fruit-									
gardens	1.50	1.83	1.67	0.86	0.75	10.45	..	1.99	1.49
Potatoes ..	0.46	1.35	0.72	0.21	0.23	13.46	..	0.94	0.82
Vineyards	0.31	1.12	0.17	1.69	0.35	..	..	0.04	0.75
All other..	2.10	2.63	11.69	1.78	1.14	21.14	..	1.36	3.28
Total ..	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(a) Not available.

3. Area of Principal Crops in Australia.—The area of the principal crops during each of the last five seasons, and the average for the decennium ended 1938-39 is shown hereunder :—

### AREA OF PRINCIPAL CROPS : AUSTRALIA.

Crop.	Average, Ten years ended 1938-39.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	'000 acres.	'000 acres.	'000 acres.	'000 acres.	'000 acres.	'000 acres.
Barley (a) .. ..	428	650	716	639	663	356
Maize .. ..	295	324	312	363	301	285
Oats .. ..	1,393	1,784	1,682	1,723	1,461	1,407
Rice .. ..	22	24	24	24	24	34
Wheat .. ..	14,345	14,346	13,285	12,645	12,004	9,280
Green Fodder .. ..	1,272	1,789	1,854	1,989	1,808	2,112
Hay .. ..	2,994	3,250	2,999	2,353	2,758	2,359
Beans and Peas .. ..	40	43	50	51	58	77
Onions .. ..	8	7	7	7	8	10
Potatoes (b) .. ..	130	98	105	123	99	140
Sugar-beet .. ..	3	4	4	4	3	1
Vineyards .. ..	118	127	127	130	129	130
Hops .. ..	1	1	1	1	1	1
Sugar-cane .. ..	332	357	375	371	352	329
Cotton .. ..	43	66	41	41	61	56
Tobacco .. ..	12	8	8	8	9	7
Market-gardens (c) .. ..	34	66	76	79	96	129
Orchards .. ..	276	272	271	270	267	260
All Other Crops .. ..	203	282	313	297	348	357
<b>Total</b> .. ..	<b>21,958</b>	<b>23,498</b>	<b>22,250</b>	<b>21,118</b>	<b>20,450</b>	<b>17,420</b>

(a) Malting only.

(b) Excludes Sweet Potatoes.

(c) Includes Pumpkins and Melons.

4. Total and Average Production of Principal Crops in Australia.—The following table shows the production of the principal crops for the five years ended 1942-43 and for the decennium ended 1938-39 :—

### TOTAL AND AVERAGE PRODUCTION OF PRINCIPAL CROPS : AUSTRALIA.

Crop.	Unit of Quantity.	Average, Ten years ended 1938-39.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
Barley (a) .. ..	'000 bus.	7,480	9,704	13,732	6,185	15,713	6,782
Maize .. ..	" "	7,228	7,057	6,560	9,193	7,436	6,885
Oats .. ..	" "	16,437	15,555	25,302	10,199	22,302	21,532
Rice .. ..	" "	2,005	2,775	1,838	2,240	2,192	3,084
Wheat .. ..	" "	169,398	155,399	210,487	82,233	166,713	155,728
Hay .. ..	" tons	3,490	3,321	4,158	2,177	3,575	3,116
Beans and Peas .. ..	" bus.	734	495	808	596	(b) (d) 14	(b) (d) 25
Onions .. ..	" tons	43	18	38	33	34	55
Potatoes (c) .. ..	" "	351	274	323	460	333	484
Sugar (Beet) .. ..	" "	5	1.5	6.3	3.3	2.8	0.7
Grapes .. ..	" "	381	402	475	430	464	480
Wine .. ..	" gals.	16,330	14,958	14,775	16,009	15,857	19,793
Raisins and Currants .. ..	" tons	70	75	95	81	93	91
Hops .. ..	" lb.	2,127	2,402	1,992	3,248	3,032	2,779
Sugar (Cane) .. ..	" tons	658	823	929	806	746	650
Cotton, Unginned .. ..	" lb.	15,667	13,688	17,550	12,108	15,869	14,058
Tobacco .. ..	" "	5,336	4,046	4,912	5,476	7,040	4,069
Pumpkins and Melons .. ..	" tons	60	81	96	138	(d) 87	(d) 144

(a) Malting only.

(b) Tons.

(c) Excludes Sweet Potatoes.

(d) Incomplete.



5. **Average Yield per Acre of Principal Crops in Australia.**—The following table shows the yield per acre for Australia of the principal crops for the five years ended 1942-43 and for the decennium ended 1938-39.

**AVERAGE YIELD PER ACRE OF PRINCIPAL CROPS : AUSTRALIA.**

Crop.	Unit of Quantity.	Average, Ten years ended 1938-39.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
Barley (a) .. ..	Bushel	17.49	14.92	19.19	9.68	23.72	19.03
Maize .. ..	"	24.53	21.77	21.04	25.33	24.67	24.19
Oats .. ..	"	11.80	8.72	15.04	5.92	15.27	14.38
Rice .. ..	"	93.00	117.92	77.02	91.26	92.75	90.11
Wheat .. ..	"	11.81	10.83	15.84	6.50	13.89	16.78
Hay .. ..	Ton	1.17	1.02	1.39	0.93	1.30	1.32
Onions .. ..	"	5.54	2.74	5.60	4.92	4.60	5.63
Potatoes (b) .. ..	"	2.71	2.80	3.09	3.74	3.35	3.45
Sugar (Beet) .. ..	"	1.40	0.35	1.48	0.91	0.97	0.71
Grapes (c) .. ..	"	3.45	3.43	3.98	3.51	3.75	3.86
Wine (c) .. ..	Gallon	..	300	295	316	318	397
Raisins and Currants (c) .. ..	Ton	..	1.26	1.56	1.27	1.44	1.39
Hops (c) .. ..	lb.	2,003	2,235	1,806	2,862	2,264	2,106
Sugar (Cane) (c) .. ..	Ton	2.76	3.14	3.41	2.95	2.93	2.70
Cotton, Unginned (c) .. ..	lb.	366.06	206	424	293	258	249
Tobacco .. ..	"	462.75	518	584	640	798	693
Pumpkins and Melons .. ..	Ton	2.75	2.65	2.64	3.29	2.45	2.85

(a) Malting only.

(b) Excludes Sweet Potatoes.

(c) Per acre of productive crops.

6. **Gross Value of Agricultural Production in Australia.**—The following table shows the gross value of recorded agricultural production at the principal markets in each State for the years 1937-38 to 1942-43 :—

**GROSS VALUE OF AGRICULTURAL PRODUCTION : AUSTRALIA.**

Crops.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
Barley (a) .. ..	£'000.	£'000.	£'000.	£'000	£'000.	£'000.
Maize .. ..	2,231	1,417	2,429	1,474	2,316	1,124
Oats .. ..	1,761	1,503	1,365	2,040	1,632	2,251
Rice .. ..	2,537	2,085	2,597	1,523	2,697	2,911
Wheat .. ..	459	540	413	474	506	759
	37,000	21,989	38,775	17,145	30,764	33,041
Green Fodder .. ..	3,043	2,999	3,039	3,558	3,764	4,205
Hay .. ..	13,629	12,704	10,567	8,278	12,988	14,445
Beans and Peas .. ..	222	253	377	411	455	607
Onions .. ..	255	306	296	456	543	781
Potatoes (b) .. ..	2,442	3,649	3,497	2,834	4,312	5,961
Sugar-beet .. ..	97	27	99	59	53	14
Grapes .. ..	4,865	3,924	4,657	4,618	5,377	5,994
Hops .. ..	190	183	148	244	233	219
Sugar-cane .. ..	9,065	9,178	11,192	10,655	9,607	9,282
Tobacco .. ..	513	360	504	625	822	577
Cotton, Unginned .. ..	205	230	301	205	304	320
Market-gardens (c) .. ..	2,395	2,473	2,818	2,923	2,941	(d)
Orchards .. ..	9,204	9,695	9,212	9,241	10,512	14,253
Other Crops .. ..	3,116	3,336	3,498	3,643	4,625	(d)
Total, Gross Value .. ..	93,229	76,851	95,784	70,406	94,451	111,230

(a) Malting only.

(b) Excludes Sweet Potatoes.

(c) Includes Pumpkins and Melons,

(d) Not yet available separately.

7. **Value of Production—Gross and Net.**—(i) *General.* Uniform methods for arriving at the gross and net values of production in the various States were finally determined at a Conference of Statisticians held in March, 1935. The returns for the year 1933-34 and subsequent years have been valued on the new basis, and a revaluation was made for the years back to 1928-29. A more detailed reference to the value of production of agriculture and other industries in Australia as well as a brief explanation of the terms used will be found in Chapter XXVII "Miscellaneous".

In computing the net value of production no deduction has been made for the cost of maintenance of farm buildings and fences, nor for the depreciation of farm machinery ; consequently the figure stated is inflated to this extent.

### GROSS, FARM AND NET VALUES OF AGRICULTURAL PRODUCTION, 1942-43.

(As Estimated by State Statisticians in Accordance with Conference Resolutions.)

State.	Gross Production valued at Principal Markets.	Marketing Costs.	Gross Production valued at Farm.	Farm Costs.		Net Value of Production. (a)	Depreciation (estimated)
				Seed used, and Fodder for Farm Stock.	Value of other Materials used in process of production.		
	£	£	£	£	£	£	£
New South Wales ..	33,892,000	5,644,000	28,248,000	4,013,000	6 687,000	23,548,000	(c)
Victoria (d) ..	28,333,943	3,914,658	24,419,285	4,119,065	1,273,912	19,026,308	900,000
Queensland ..	20,376,000	2,000,000	18,376,000	1,540,000	1,420,000	15,416,000	930,000
South Australia ..	15,044,018	1,923,998	13,120,020	1,504,935	1,298,744	10,316,341	594,493
Western Australia ..	8,232,276	1,167,683	7,064,593	945,649	1,163,279	4,955,665	551,900
Tasmania ..	5,427,080	963,760	4,463,320	761,340	176,070	3,525,910	109,250
<b>Total</b> ..	<b>111,305,317</b>	<b>15,614,099</b>	<b>95,691,218</b>	<b>12,883,989</b>	<b>6,019,005</b>	<b>76,788,224</b>	<b>23,085,643</b>

(a) No deduction has been made for depreciation and maintenance. (b) No allowances made for costs of power, power kerosene, petrol and other oils. (c) Not available. (d) Subject to revision. (e) Incomplete.

(ii) *States 1933-34 to 1942-43.* In the following table the net value of agricultural production and the net value per head of population are given by States for each year since 1933-34 :—

### VALUE OF AGRICULTURAL PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
NET VALUE.(a)							
	£	£	£	£	£	£	£
1933-34 ..	11,724,000	10,077,018	9,703,968	5,909,760	4,598,144	1,679,380	43,692,270
1934-35 ..	12,787,000	8,735,776	9,018,187	6,375,538	4,268,547	1,921,150	43,136,198
1935-36 ..	13,285,000	11,716,768	9,699,000	7,336,653	4,678,390	1,723,180	48,438,993
1936-37 ..	19,364,000	16,356,341	10,706,000	9,057,406	5,921,108	1,708,630	63,113,485
1937-38 ..	14,829,000	14,962,412	11,264,000	9,159,941	6,142,705	2,482,500	58,840,558
1938-39 ..	11,804,000	5,619,765	11,615,000	5,489,228	4,065,616	3,084,971	41,678,580
1939-40 ..	16,350,000	11,907,131	13,696,000	9,458,140	7,064,100	2,433,760	60,909,131
1940-41 ..	9,155,000	7,097,209	13,723,000	6,048,310	3,678,106	1,730,480	41,432,105
1941-42 ..	15,630,000	15,511,086	13,380,000	7,769,642	6,335,815	3,179,810	61,806,353
1942-43 ..	23,548,000	19,026,308	15,416,000	10,316,341	4,955,665	3,525,910	76,788,224

### NET VALUE PER HEAD OF MEAN POPULATION.

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1933-34 ..	4 9 9	5 10 5	10 4 2	10 2 11	10 8 10	7 6 8	6 11 4
1934-35 ..	4 17 1	4 15 2	9 7 8	10 18 3	9 12 8	8 10 4	6 11 9
1935-36 ..	5 0 0	6 7 1	9 19 6	12 10 4	10 8 11	7 9 8	7 3 6
1936-37 ..	7 4 6	8 16 7	10 17 7	15 7 11	13 2 1	7 7 2	9 5 6
1937-38 ..	5 9 6	8 0 9	11 6 4	15 10 2	13 8 8	10 11 3	8 11 5
1938-39 ..	4 6 4	2 19 11	11 10 9	9 4 8	8 15 9	13 0 5	6 0 4
1939-40 ..	5 18 5	6 6 0	13 8 5	15 16 1	15 1 7	10 3 5	8 14 1
1940-41 ..	3 5 10	3 13 11	13 5 11	10 1 10	7 15 7	7 3 11	5 17 5
1941-42 ..	5 11 7	7 18 9	12 17 9	12 15 11	13 10 5	13 5 1	8 13 2
1942-43 ..	8 6 4	9 13 1	14 15 8	16 16 7	10 6 5	14 12 1	10 13 4

(a) No deduction has been made for depreciation and maintenance.

## § 4. Wheat.

1. *Royal Commission on the Wheat Industry.*—A Royal Commission was appointed in January, 1934, to inquire into and report upon the economic condition of the industries of growing, handling and marketing wheat, and the manufacturing, distributing and

selling of flour and bread. A searching inquiry was made by the Commission and the results of its investigations were submitted in a series of five reports. The first and second reports covered the wheat-growing industry, the third, that of baking, the fourth the flour-milling industry, while the fifth, completed in February, 1936, dealt with the history of the Commission's investigations and traversed the principal recommendations submitted.

Reference to the financial assistance to the wheat industry will be found in § 18, Bounties, hereafter.

2. Progress of Wheat-growing.—(i) *Area*. Wheat is the principal crop raised in Australia, and its progress since 1860 has been almost continuous. Prominent features in its early development were the increase in population following the discovery of gold and the redistribution of labour after the surface gold had been won. The economic depression of 1893 interrupted its progress but its subsequent recovery was assisted by the invention of mechanical appliances, the use of superphosphate as an aid to production, and the introduction of new and more suitable varieties for Australian conditions. The establishment of closer settlement schemes and the settling of returned soldiers and others on the land were additional factors in its expansion. The most serious interruptions in more recent years were those occasioned by the two World Wars and the economic depression of the early thirties. As previously mentioned, any variation in the acreage sown to this cereal is materially reflected in the total area of crops. The area and yield of wheat for grain in each State are given below for the five years ended 1942-43; the table also includes an estimate for the 1943-44 crop and the average for the decennium ended 1942-43:—

#### WHEAT : AREA AND PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Australia.
AREA ('000 OMITTED).								
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1938-39 ..	4,651	2,748	442	3,080	3,413	10	2	14,346
1939-40 ..	4,381	2,827	362	2,735	2,970	8	2	13,285
1940-41 ..	4,454	2,673	322	2,560	2,625	8	2	12,644
1941-42 ..	3,969	2,757	291	2,326	2,653	6	1	12,003
1942-43 ..	3,033	2,145	335	2,009	1,753	4	1	9,280
1943-44 ..	2,693	1,794	281	1,534	1,552	5	1	7,860
Average for ten seasons ended 1942-43 ..	4,126	2,607	310	2,893	2,750	13	2	12,701

#### PRODUCTION ('000 OMITTED).

	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1938-39 ..	59,898	18,104	8,584	31,675	36,844	205	59	155,369
1939-40 ..	76,552	45,054	6,795	41,072	40,861	108	45	210,487
1940-41 ..	23,933	13,522	5,687	17,856	21,060	140	35	82,233
1941-42 ..	48,500	46,954	3,080	30,511	37,500	145	23	166,713
1942-43 ..	51,693	41,803	5,005	36,526	20,600	73	28	155,728
1943-44 ..	47,500	19,733	5,089	20,691	16,385	122	39	109,559
Average for ten seasons ended 1942-43 ..	52,591	36,247	4,604	32,423	30,224	282	41	156,412

A graph showing the expansion of the area sown to wheat for grain in Australia since 1860 appears on page 803. Graph showing the distribution in 1924-25 is shown in Official Year Book, No. 22, p. 695 and the distribution of area for 1938-39 is shown in Official Year Book No. 34, p. 451.

(ii) *Production*. The size of the wheat harvest in Australia is largely determined by the nature of the season and inconsistencies in this respect are reflected in the yearly production.

It should be noted, however, that with improved farming methods, which include the proper tillage of the soil, rotation of crops, the growing of suitable varieties and the application of fertilizers, average yields per acre during the past four decades have shown a continued improvement, and fluctuations in production have become less pronounced.



Australia's wheat production in 1942-43 amounted to 155.7 million bushels representing a record average yield of 16.78 bushels per acre. However, production for that year represents a decline of almost 11 million bushels. The estimates available for 1943-44 indicate a harvest of only 110 million bushels or a return of 13.94 bushels per acre.

(iii) *Decennial Averages, 1861-70 to 1934-43.* The following table gives the average area, production and yield per acre for decennial periods since 1861, together with the average wholesale price since 1871. The price quoted represents the average at Melbourne (Williamstown), and may be accepted as fairly representative for Australia.

### WHEAT : AVERAGE AREA, PRODUCTION AND WHOLESALE PRICE, AUSTRALIA.

Decennium.	Area.	Production.	Yield per Acre.	Average Wholesale Price.	
				s.	d.
1861-70 .. ..	'000 Acres. 831	'000 Bushels. 10,622	Bushels. 12.77	(a)	
1871-80 .. ..	1,646	17,711	10.76	5	1
1881-90 .. ..	3,258	26,992	8.29	4	7
1891-1900 .. ..	4,087	29,934	7.32	3	8
1901-10 .. ..	5,711	56,058	9.82	3	10
1911-20 .. ..	8,923	95,480	10.69	5	0
1921-30 .. ..	11,291	135,400	11.99	5	8
1931-40 .. ..	14,176	177,758	12.54	3	4½
1934-43 .. ..	12,701	156,412	12.31	(a)	

(a) Not available.

(iv) *Average Yield.* In the next table will be found the average yield of wheat per acre for specified periods :—

### WHEAT : YIELD PER ACRE.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Australia.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1936-37 ..	13.98	17.90	7.11	9.39	8.37	26.78	17.98	12.29
1937-38 ..	12.34	17.93	10.05	13.74	11.97	24.95	24.24	13.63
1938-39 ..	12.88	6.59	19.42	10.28	10.79	20.84	28.74	10.83
1939-40 ..	17.48	15.93	18.77	15.02	13.76	14.37	18.54	15.84
1940-41 ..	5.37	5.06	17.66	6.97	8.02	17.46	17.09	6.50
1941-42 ..	12.22	17.03	10.59	13.12	14.13	22.64	17.64	13.89
1942-43 ..	17.04	19.49	14.95	18.18	11.75	17.76	24.88	16.78
1943-44(a)	17.64	11.01	18.11	13.49	10.56	24.40	19.50	13.94
Average 10 seasons, ended 1942-43	12.75	13.91	14.84	11.21	10.99	21.80	21.53	12.31

(a) Estimated.

Variation in the average yield is chiefly due to the vagaries of the seasons. The best average yields for single seasons since 1901 were obtained in 1920-21, 16.08 bushels; in 1924-25, 15.20 bushels; in 1939-40, 15.84 bushels; and in 1942-43, 16.78 bushels.

(v) *Relation to Population.* The main wheat-producing States of Australia are New South Wales, Victoria, South Australia and Western Australia. Queensland production closely approaches local demands, but Tasmania imports from the mainland to satisfy its needs, though partly in exchange it ships flour made from local wheat which is particularly suitable for biscuits. Normally the production of wheat greatly exceeds Australian requirements, and from half to three-quarters of the crop is exported overseas.

3. **Wheat Farms.**—Particulars of the number of farms growing wheat for grain on 20 acres and upwards during each of the five years ended 1940-41 are shown in the following table. It should be noted that a farm worked on the share system or as a partnership is included as one holding only.

NUMBER OF FARMS GROWING WHEAT FOR GRAIN ON 20 ACRES AND UPWARDS :  
AUSTRALIA.

State.	1936-37.	1937-38.	1938-39.	1939-40.	1940-41.
	No.	No.	No.	No.	No.
New South Wales ..	15,425	16,287	16,550	16,175	15,831
Victoria ..	12,090	12,936	12,305	12,065	11,972
Queensland ..	2,211	2,809	3,190	2,542	2,169
South Australia ..	12,155	12,251	11,842	11,468	10,986
Western Australia ..	8,625	8,841	8,989	8,482	8,074
Tasmania ..	379	372	146	143	140
Total ..	50,885	53,496	53,022	50,875	49,172

4. **World Production of Wheat.**—(i) *Average Yield.* The next table gives the average return per acre in the principal wheat-growing countries of the world for the latest available period. These range from a maximum in the Netherlands of 45 bushels per acre to a minimum in Palestine of 6 bushels per acre :—

WHEAT : YIELD PER ACRE IN VARIOUS COUNTRIES.

Country.	Average Yield in Bushels per acre.		Country.	Average Yield in Bushels per acre.	
	Average, 1936-1938.	1939.		Average, 1936-1938.	1939.
Netherlands ..	44.90	43.50	Chile ..	16.15	(a) 17.40
Denmark ..	44.68	(a) 52.17	China ..	(e) 15.65	(f) 14.93
Belgium ..	40.50	(b) 42.90	Argentina ..	15.35	8.30
Sweden ..	35.41	38.00	Greece ..	15.21	14.80
Germany ..	35.30	(c) 34.30	Brazil ..	(d) 14.39	(d) 14.39
Switzerland ..	33.92	32.10	U.S.S.R. (Russia)	14.23	(a) 14.85
United Kingdom ..	33.22	33.90	Syria ..	13.97	(a) 16.54
New Zealand ..	32.08	(a) 29.40	U.S.A. ..	13.25	11.30
Eire ..	31.56	31.00	Australia ..	12.24	15.84
Egypt ..	31.47	32.70	Manchukuo ..	11.99	(a) 10.40
Norway ..	30.17	(a) 30.40	Uruguay ..	11.90	(a) 11.39
Finland ..	27.10	26.00	Korea ..	11.83	(a) 12.31
Japan ..	26.92	33.50	Portugal ..	11.52	(a) 14.00
Czechoslovakia ..	26.26	(a) 29.60	Iraq ..	11.36	(a) 12.26
France ..	22.55	23.60	Spain ..	11.28	12.70
Hungary ..	21.76	24.00	India ..	10.95	10.50
Italy ..	21.56	22.90	Mexico ..	9.98	(a) 10.20
Bulgaria ..	21.38	23.40	Canada ..	9.92	17.90
Yugoslavia ..	19.07	19.40	Algeria ..	7.71	10.40
Iran ..	(d) 18.81	(d) 18.81	Columbia ..	(e) 7.48	(f) 6.75
Latvia ..	18.52	(a) 20.26	Tunisia ..	7.47	8.90
Poland ..	17.86	19.10	Union of South Africa ..	7.28	(a) 8.36
Lithuania ..	16.78	18.40	French Morocco ..	6.11	12.20
Rumania ..	16.64	17.20	Palestine ..	5.80	10.00
Estonia ..	16.58	16.20			
Turkey ..	16.31	(a) 16.40			

(a) Year 1938.

(b) Includes Luxembourg.

(c) Includes Austria and Sudeten area.

(d) Year 1936.

(e) Subject to revision.

(f) Year 1937.

(ii) *Production by Countries.* The latest available official statistics of the production of wheat in various countries are given in the following table:—

**WHEAT : TOTAL PRODUCTION IN VARIOUS COUNTRIES.**

Country.	Yield in Bushels (‘000 omitted).		Country.	Yield in Bushels (‘000 omitted).	
	Average, 1936-1938.	1939.		Average, 1936-1938.	1939.
U.S.S.R. (Russia)	1,418,307	1,494,000	Chile .. ..	31,544	(a) 35,174
U.S.A. .. ..	810,433	739,400	Sweden .. ..	25,810	31,500
China (b) ..	706,956	(c) 636,456	Iraq .. ..	21,015	(a) 22,046
India .. ..	373,756	371,000	Syria and Lebanon	18,961	(a) 23,674
France .. ..	284,128	276,000	French Morocco ..	18,767	38,800
Italy .. ..	272,641	294,000	Belgium .. ..	17,278	(f) 17,000
Argentina ..	256,281	147,000	Netherlands ..	15,033	13,300
Canada .. ..	253,884	479,000	Union of South		
Germany .. ..	177,248	(d) 205,200	Africa .. ..	14,481	15,000
Australia ..	163,470	210,487	Denmark .. ..	13,949	14,000
Rumania ..	148,011	164,900	Uruguay .. ..	13,702	(a) 15,461
Turkey .. ..	144,970	158,000	Tunisia .. ..	13,233	18,600
Spain .. ..	(e) 121,493	111,800	Portugal .. ..	12,911	18,300
Yugoslavia ..	101,669	105,400	Mexico .. ..	12,539	13,000
Hungary .. ..	85,893	112,100	Korea .. ..	9,867	12,300
Iran .. ..	(e) 79,352	(e) 79,352	Lithuania .. ..	8,429	9,200
Poland .. ..	76,313	83,400	Ire .. ..	7,408	8,000
Bulgaria ..	67,722	71,200	Finland .. ..	7,055	8,670
United Kingdom..	61,649	59,700	New Zealand ..	6,262	(a) 5,910
Czechoslovakia ..	57,835	40,000	Latvia .. ..	6,208	6,500
Japan .. ..	46,950	61,000	Switzerland ..	6,118	6,559
Egypt .. ..	45,672	49,000	Brazil .. ..	(e) 5,512	(e) 5,512
Manchukuo ..	33,772	39,000	Columbia .. ..	(b) 3,734	(c) 3,336
Algeria .. ..	32,642	42,600	Palestine .. ..	3,036	5,000
Greece .. ..	32,321	35,300	Estonia .. ..	2,786	3,010

NOTE.—The harvests reported above for 1939 relate to the year 1939 for the Northern, and 1939-40 for the Southern Hemisphere.

(a) Year 1938. (b) Recorded production. Subject to revision. (c) Year 1937. (d) Includes Austria and Sudeten area. (e) Year 1936. (f) Includes Luxemburg.

(iii) *Total World Production.* A complete statement of the world's production of wheat is not possible owing to the failure of certain countries to supply the necessary information. The International Institute of Agriculture, Rome, has, however, compiled figures obtained from the countries reporting and the latest available figures are given in the following table. The output of China has been omitted. Normally this country is a large producer of wheat and is generally ranked with the United States next to the U.S.S.R. (Russia). In 1937, the recorded production exceeded 636 million bushels but this refers to some provinces and does not include the output of all Territories forming the Chinese Republic.

**WHEAT : WORLD'S PRODUCTION.(a)**

Year.		Area.	Production.	Yield per acre.
		'000 Acres.	'000 Bushels.	Bushels.
Average 1909-1913..		270,266	3,779,479	13.98
,, 1928-1932..		337,761	4,652,000	13.77
1934 .. ..		330,941	4,620,520	13.96
1935 .. ..		339,244	4,698,784	13.85
1936 .. ..		345,347	4,653,590	13.48
1937 .. ..		365,115	5,435,863	14.89
1938 .. ..		379,076	6,007,964	15.85
Average 1934-1938..		351,945	5,083,344	14.44

(a) From countries reporting including the U.S.S.R. (Russia) but excluding China.



As a producer of wheat, Australia occupies tenth position on the list of producing countries of the world and, on the average of the five years 1934-38, contributed about 3½ per cent. of the area and 3 per cent. of production. As an exporter of wheat, however, Australia occupies a prominent position, ranking next after Canada and Argentina. During the five years 1934-38, exports of wheat and flour, in terms of wheat, from Australia averaged nearly 18½ per cent. of the world net exports compared with 7½ per cent., the average for the quinquennium 1909-13.

(iv) *World Wheat Supplies, Requirements and Carryover.* The following table of world wheat statistics has been compiled from the latest available data published by the International Institute of Agriculture. It shows details of the world exportable supplies, import requirements, carryover stocks and consumption covering four quinquennial periods and the years 1938 and 1939.

The figures given exclude, where indicated, details in respect of the Soviet Union, China, Iraq and Iran. This omission is due to the insufficiency of data respecting these countries.

### WHEAT : WORLD STATISTICS.

(In million bushels.)

Period.	World Exportable Supplies.(a)	World Import Require- ments.	End of Season Stocks.		World Consump- tion.(b)	World Production. (b)
			Exporting Countries. (a)	World.		
Average five years ended—						
1913-14 ..	(c)	680	(c)	(c)	3,300	3,130
1927-28 ..	960	780	180	620	3,440	3,480
1932-33 ..	1,290	765	525	980	3,770	3,860
1937-38 ..	840	540	300	790	3,760	3,640
Year—						
1938-39 (d) ..	1,138	618	520	1,100	3,993	4,508
1939-40 (d) ..	1,324	610	714	1,319	3,969	4,185

(a) Stocks held by the four major exporting countries, European exporting countries and those afloat.

(b) Excludes Soviet Union, China, Iraq and Iran.

(c) Not available.

(d) Estimated.

5. *Price of Wheat.*—The collapse in the price of wheat which occurred between 1928 and 1931 was chiefly due to the accumulation of stocks in exporting countries. The weighted average price of wheat (shippers' limits Sydney, Melbourne and Adelaide) fell from 5s. 1½d. in 1928 to 2s. 4½d. in 1931, a decline of 53 per cent. Subsequent to 1931, prices fluctuated between 2s. 6d. and 3s. per bushel until 1936 when an upward movement coincided with the depletion of excess stocks following crop failures in North America. By December, 1936, prices exceeded 5s. per bushel and remained at that level during 1937. By the end of 1938, world exportable surpluses had again accumulated. Prices receded during 1938 and by August, 1939, had reached the lowest level recorded in Australia, viz., 2s. 1d. per bushel.

On 21st September, 1939, the Australian Wheat Board was appointed under war-time legislation and the price of wheat for export or local consumption is determined by that authority. In consequence, the open market for wheat ceased and therefore a price comparison on a pre-war basis is no longer possible. The following table shows the price of wheat in Australia for the periods indicated. The price stated for 1940 and subsequent years represents the approximate average price of wheat exported during those years.

## PRICE OF WHEAT : AUSTRALIA.

(WEIGHTED AVERAGE OF SHIPPERS' LIMITS FOR GROWERS' BAGGED AND BULK LOTS, SYDNEY, MELBOURNE AND ADELAIDE.)

Item.	1938.	1939. (a)	1940. (b)	1941. (b)	1942. (b)	1943. (b)
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Price per bushel	3 4 $\frac{3}{4}$	2 4	3 11 $\frac{1}{2}$	4 2	4 2	4 3 $\frac{3}{4}$

(a) Average for eight months ended August.

(b) Approximate export price.

6. Exports of Wheat and Flour.—(i) *Quantities.* The following table shows the exports and net exports of wheat and flour from 1938-39 to 1942-43. For the sake of convenience, flour has been expressed at its equivalent in wheat, 1 ton of flour being taken as equal to 48 bushels of grain. Wheat and flour have been imported to tide over lean seasons on only two occasions since 1900; in 1902-3 the wheat harvest was as low as 12,378,000 bushels, and wheat and flour representing 12,468,000 bushels of wheat were imported, whilst an equivalent of 7,279,000 bushels was imported in 1914-15 to supplement the yield of 25 million bushels produced in that season. During the last five years exports in terms of wheat ranged between 38,946,000 bushels in 1942-43 and 97,932,000 bushels in 1938-39, the net exports for the period averaging 68,660,000 bushels:—

## WHEAT AND FLOUR : EXPORTS FROM AUSTRALIA.

Year.	Exports.			Net Exports.
	Wheat.	Flour.	Total.	
	'000 Bushels.	'000 Eq. Bushels.(a)	'000 Bushels.	'000 Bushels.
1938-39 ..	63,129	34,803	97,932	97,931
1939-40 ..	47,593	32,846	80,439	80,438
1940-41 ..	46,957	37,051	84,008	83,996
1941-42 ..	22,312	19,856	42,168	42,008
1942-43 ..	22,544	16,402	38,946	38,927

(a) Wheat equivalent in bushels of wheat.

(ii) *Destination.* (a) *Wheat.* The following table gives the exports of wheat to various countries for each of the five years ended 1942-43, and the average for the five years ended 1938-39.

## WHEAT : EXPORTS FROM AUSTRALIA.

('000 omitted.)

Country to which Exported.	Average, Five years ended 1938-39.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
United Kingdom ..	45,195	32,235	29,079	24,104	6,900	8,987
India ..	1,662	6,922	1,100	699	758	6,360
Elre ..	3,276	2,303	460	790	..	..
Union of South Africa ..	602	1,706	1,621	2,046	4,710	1,354
Other British Countries	2,246	3,880	2,360	4,014	5,072	3,882
Belgium ..	756	324	..	..	..	..
China ..	6,151	10,621	3,064	3,519	..	..
Egypt ..	503	389	212	1,105	3,496	..
France ..	939	..	1,183	..	..	..
Germany ..	235	376	..	..	..	..
Italy ..	3,152	..	..	..	..	..
Japan ..	6,471	431	6,371	3,751	268	..
Other Foreign Countries	5,285	3,942	2,143	(a) 6,929	1,108	1,961
Total ..	76,473	63,129	47,593	46,957	22,312	22,544

(a) Includes 253,000 bushels lost at sea.

(b) *Flour*.—The following table gives the exports of flour to various countries for each of the five years ended 1942-43, and the average for the five years ended 1938-39:—

**FLOUR : EXPORTS FROM AUSTRALIA.**

Country to which Exported.	Average, Five years ended 1938-39.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
United Kingdom .. ..	142,912	118,957	189,437	80,418	10,480	23,291
Ceylon .. ..	16,915	18,147	18,034	19,312	27,301	188,409
Hong Kong .. ..	44,966	23,040	15,304	36,446	19,386	..
Malaya (British) .. ..	63,309	66,965	79,348	90,107	67,153	..
Union of South Africa .. ..	306	132	1,745	2,422	7,566	9,712
Other British Countries .. ..	67,069	86,494	95,360	66,523	122,754	86,960
China .. ..	50,460	216,878	51,217	201,670	5,442	..
Egypt .. ..	24,284	17,153	32,842	43,909	50,765	13,949
Manchuria (a) .. ..	74,867	..	13,242	35,877	..	..
Netherlands East Indies .. ..	83,751	96,524	109,161	114,144	70,547	..
Philippine Islands .. ..	32,690	32,722	29,519	18,838	7,472	..
Other Foreign Countries .. ..	45,544	48,053	49,085	62,239	24,816	19,397
<b>Total .. ..</b>	<b>647,073</b>	<b>725,065</b>	<b>684,303</b>	<b>771,905</b>	<b>413,682</b>	<b>341,718</b>

(a) Includes Kwantung Peninsula.

7. **Exports—Principal Countries.**—The following table shows the latest available net quantities of wheat exported from the chief exporting countries in recent years and during the period from 1909 to 1913. In the years before the War of 1914-19 the U.S.S.R. (Russia) was the outstanding contributor to the world's supply of wheat followed by the United States of America. Owing to increased demands within their own borders, however, the net exports from both of these countries have since become relatively unimportant. Canada now occupies the foremost position with the Argentina and Australia coming next in order.

Although the local production of wheat is little more than 3 per cent. of the world's total, the exports from Australia represented just under 18½ per cent. of the quantities shipped during 1934 to 1938, and as an exporting country Australia has made the greatest relative advance since 1913.

**WHEAT (a) : NET EXPORTS, PRINCIPAL COUNTRIES.**

Country.	Average 1909-13.		1937.	1938.	Average 1934-38.	
	'000 Bushels.	Per cent.	'000 Bushels.	'000 Bushels.	'000 Bushels.	Per cent.
U.S.S.R. (Russia)(b) ..	157,109	23.71	33,803	39,154	22,520	4.04
U.S.A. .. ..	100,864	15.22	36,416	105,540	43,648	7.83
Argentina .. ..	95,041	14.34	147,493	75,413	122,739	22.01
Canada .. ..	89,919	13.57	112,462	125,195	175,407	31.45
British India .. ..	50,886	7.68	20,043	12,203	8,877	1.59
Australia .. ..	49,417	7.46	99,658	124,202	102,695	18.41
All Other Countries ..	119,351	18.02	108,431	99,303	81,839	14.67
<b>Total .. ..</b>	<b>662,587</b>	<b>100.00</b>	<b>558,306</b>	<b>581,010</b>	<b>557,725</b>	<b>100.00</b>
World's Production ..	3,779,479		5,435,863		5,083,344	
Percentage of Aus- tralian Net Exports on Total Net Exports	7.46		17.85		18.41	
Percentage of Aus- tralian Production on World's Produc- tion .. ..	2.39		3.46		3.02	

(a) Includes flour expressed in terms of wheat. (b) The average for 1909-13 is not strictly comparable with the later years, owing to changes of frontiers during 1921.



8. Imports—Principal Countries.—The quantities of wheat and flour (expressed in terms of wheat) imported into the principal countries for the periods indicated are shown in the following table :—

WHEAT<sup>(a)</sup> : IMPORTS, PRINCIPAL COUNTRIES.<sup>(b)</sup>

Country Importing.	Average, 1909-13.		1937.	1938.	Average, 1934-38.	
	'000 Bushels.	Per cent.	'000 Bushels.	'000 Bushels.	'000 Bushels.	Per cent.
United Kingdom ..	219,365	30.42	202,058	208,854	208,749	33.80
Germany .. ..	89,732	12.44	47,161	48,253	25,606	4.15
Netherlands ..	76,340	10.59	24,058	27,009	22,584	3.66
Belgium .. ..	73,963	10.26	44,972	38,196	42,856	6.94
Italy .. .. .	57,156	7.93	61,097	10,698	25,891	4.19
France .. .. .	38,682	5.36	18,931	19,332	23,767	3.85
Brazil .. .. .	20,774	2.88	36,226	7,146	29,812	4.83
Egypt .. .. .	7,915	1.10	115	208	586	0.09
Union of South Africa	6,519	0.90	38	2,643	753	0.12
China (c) .. ..	5,526	0.77	6,914	24,242	27,471	4.45
Japan .. .. .	3,714	0.52	7,555	2,617	11,551	1.87
All Other .. ..	121,409	16.83	187,599	202,295	198,051	32.05
Total .. .. .	721,095	100.00	636,724	591,493	617,677	100.00

(a) Includes flour expressed in terms of wheat.

(b) In some instances the average 1909-13 is not strictly comparable with the other years shown, owing to changes of frontiers.

(c) Includes Manchurian ports.

9. Consumption of Wheat in Australia.—The estimated consumption of wheat for food and the quantity used for seed in Australia during the last five years are shown as follows :—

AVERAGE HUMAN CONSUMPTION, 1938-39 TO 1942-43.

Flour milled .. ..	1,259,375 tons
Less net exports of flour .. ..	591,176 tons
Less net exports of flour in biscuits	5,805 "
	596,981 "
	662,394
Change in flour stocks .. ..	144 "
Net quantity consumed .. ..	662,538 "
Equivalent in terms of wheat .. ..	31,802,000 bushels
Net quantity consumed per head of population—	
As flour .. .. .	(a) 187.5 lb.
Equivalent in terms of wheat .. ..	(a) 4.5 bushels

AVERAGE USED FOR SEED, 1938-39 TO 1942-43.

Average area sown for grain, hay and green forage ..	11,957,475 acres
Average quantity of seed used .. ..	11,779,325 bushels
Average quantity of seed used per acre .. ..	59 lb.
Average quantity per head of population .. ..	(a) 1.67 bushels

(a) Subject to revision.

In addition to the above, allowance must be made for wheat fed to poultry and other live stock. The quantity so used, which varies according to the movement in prices, is estimated at 13,366,000 bushels or 1.89 bushels per head of population for the five years ended 1942-43. This quantity is used in the form of grain as feed for poultry and other live stock. The use of wheat as a stock fodder is being encouraged and the Commonwealth Government is paying 6d. per bushel as a subsidy for wheat sold for fodder purposes.

Grain used for seed in Victoria, South Australia and Western Australia has been estimated on the basis of data collected from growers. In the other States estimates supplied by the Departments of Agriculture have been used. The average annual quantity used for seed during the last five years was 1.67 bushels per head of population, or 59 lb. per acre sown.

The consumption of wheat in Australia for all purposes (human consumption, live-stock and seed) during the period dealt with averaged 56,947,000 bushels, or 8.1 bushels per head of population.

10. **Value of the Wheat Crop.**—The estimated value of the wheat crop in each State and in Australia during the seasons 1941-42 and 1942-43, is shown below. The values are on a gross basis at the principal market in each State and are based upon payments actually made to producers. Pending the finalizing of the accounts of the Australian Wheat Board, these values are subject to revision.

**WHEAT : VALUE OF CROP, (a) 1941-42 and 1942-43.**

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
1941-42.	£	£	£	£	£	£	£	£
Aggregate value..	9,336,250	9,642,119	620,716	5,082,935	6,051,351	26,620	4,394	30,764,385
Value per acre ..	£2/7/1	£3/9/11	£2/2/8	£2/3/9	£2/5/7	£4/3/0	£3/7/11	£2/11/3
1942-43.								
Aggregate value..	11,232,430	9,957,340	1,014,541	7,496,642	4,219,460	14,660	5,481	33,040,554
Value per acre ..	£3/14/0	£4/4/5	£3/0/7	£3/14/8	£2/8/2	£3/11/0	£4/17/5	£3/11/5

(a) Gross value of total crop, including seed used on farm, but excludes value of straw.

11. **Varieties of Wheat Sown.**—(i) *General.* The breeding of wheat suitable to local conditions has long been established in Australia. Farrar (1845-1905) did invaluable work in pioneering this field and the results of his labour and the continued efforts of those who have since followed him have proved of immense benefit to the wheat industry of Australia. Their efforts have resulted in better average yields, a greater uniformity of sample, with which has accrued certain marketing advantages, as well as an improvement in the quality of wheat grown. More than 1,000 different varieties of Australian wheats have been catalogued by the Council for Scientific and Industrial Research but the number of the principal varieties grown during each season is restricted to about 40.

(ii) *States, 1940.* Particulars of the varieties of wheat sown and the areas thereunder are collected annually. The following table shows details of the nine principal varieties sown in the four main producing States and the percentage each bears to the total area sown for the year 1940.

**WHEAT : PRINCIPAL VARIETIES SOWN, 1940.**

New South Wales.		Victoria.		South Australia.		Western Australia.	
Variety.	Per-cent-age.	Variety.	Per-cent-age.	Variety.	Per-cent-age.	Variety.	Per-cent-age.
Bencubbin ..	28.8	Ghurka ..	47.6	Ranee ..	16.7	Bencubbin ..	35.7
Ford ..	18.4	Ranee ..	20.2	Bencubbin ..	16.1	Glucub ..	19.0
Dundee ..	9.1	Dundee ..	8.5	Dundee ..	11.3	Merredin ..	6.8
Nabawa ..	7.4	Free Gallipoli ..	5.8	Sword ..	6.6	Noongaar ..	5.4
Waratah ..	4.6	Bencubbin ..	5.3	Nabawa ..	6.5	Nabawa ..	4.0
Gular ..	4.2	Bobin ..	2.1	Waratah ..	5.8	Gluyas Early	3.7
Ranee ..	3.8	Regalia ..	1.9	Gluyas ..	5.1	Dundee ..	3.6
Bobin ..	2.5	Sepoy ..	1.4	Ghurka ..	3.6	Ranee ..	3.3
Pusa No. 4 ..	1.9	Rajah ..	1.4	Bobin ..	3.2	Totadgin ..	2.9
All Others ..	19.3	All Others ..	5.8	All Others ..	25.1	All Others ..	15.6
Total ..	100.0	Total ..	100.0	Total ..	100.0	Total ..	100.0

Continued progress in the breeding of new and better wheats has resulted in many changes in the varieties sown. In New South Wales, Bencubbin, previously a variety relatively unimportant outside Western Australia, is the leading wheat sown. It is also

the second variety sown in South Australia, while in Victoria it is unimportant, but the area sown to this wheat is increasing. The leading variety sown in Victoria between 1929 and 1934 was Free Gallipoli, but since 1935 it has been supplanted by Ghurka, Rancee and Dundee. In South Australia, Nabawa came into prominence in 1933, but in 1939, though still relatively important, it ceded the leading position to Rancee and now occupies fifth place after Bencubbin, Dundee and Sword. Nabawa was the principal variety in Western Australia until it was displaced by Bencubbin in 1934. While this latter variety had occupied only 7 per cent. of the total area in 1933, in the year following no less than 22.5 per cent. was sown to Bencubbin and in 1940 it retained its leading position with 35.7 per cent.

12. **Stocks of Wheat and Flour.**—Stocks of wheat and flour held by each State at 30th November, 1943, and the total held in Australia on the same date for the previous four years will be found in the following table. Details have been compiled from information collected from millers, merchants, the Railway Departments and other sources.

WHEAT AND FLOUR : STOCKS AT 30th NOVEMBER 1943.(a)

State.				Wheat.	Flour.	Total in terms of wheat.(a)
				Bushels.	Tons.	Bushels.
New South Wales	..	..	..	24,812,000	18,986	25,723,328
Victoria	..	..	..	37,867,000	35,666	39,578,968
Queensland	..	..	..	306,000	5,439	567,072
South Australia	..	..	..	47,105,000	14,264	47,789,672
Western Australia	..	..	..	38,864,000	5,460	39,126,080
Tasmania	..	..	..	504,000	1,364	569,472
Total, 30th November, 1943	..	..	..	149,458,000	81,179	153,354,592
"	"	1942	..	99,777,096	99,005	104,529,360
"	"	1941	..	35,777,004	128,973	41,967,684
"	"	1940	..	71,626,710	121,886	77,477,262
"	"	1939	..	16,215,827	99,283	20,981,412

(a) One ton of flour treated as equivalent to 48 bushels of wheat.

An increasingly large accumulation of wheat stocks occurred in Australia during 1943. This arose from the scarcity of shipping, while the restriction of markets due to the war and the added disadvantage of a long sea haul were additional factors. The small harvest of 1940-41, however, relieved the storage position, but with a return to normal harvests and the continuance of shipping difficulties the problem of future storage has become more accentuated.

The Australian Wheat Board has planned the storage of wheat in Australia in order to prevent deterioration and to minimize the risk of infestation by weevils and other vermin.

13. **Voluntary Wheat Pools.**—Details of wheat pools operating in Australia are given in previous issues of the Official Year Book. These pools ceased to function when the Australian Wheat Board was created in September, 1939.

14. **War-time Marketing of Wheat.**—(i) *General.* At the outbreak of war in September, 1939, the wheat industry of Australia was experiencing a period of low prices. Wheat had fallen to 2s. 1d. per bushel in August, 1939, compared with 3s. 1d. in August, 1938, 5s. 1d. in August, 1937, and 2s. 2d. per bushel in the same month of 1931, which was the lowest monthly quotation during the economic depression of that period.

Apart from low prices, other difficulties created by war conditions were those of marketing and transport. There was also a large accumulation of surplus stocks in the chief exporting countries of the world and this combined with the natural disability of Australia's remoteness from the main centres of consumption was another factor adding to a most difficult position.

In view of these circumstances, the Commonwealth Government, under the Wheat Acquisition Regulations, constituted the Australian Wheat Board on the 21st September, 1939, to acquire, with certain exceptions, all wheat held in Australia. The harvest of 1939-40 was also acquired by notification published on 16th November, 1939.



(ii) *Australian Wheat Board.* Under the Wheat Acquisition Regulations, the Board was empowered, subject to directions of the Minister for Commerce, to purchase, sell or dispose of wheat or wheat products, manage and control all matters connected with the handling, storage, protection, shipment, etc., of wheat acquired, and such other matters necessary to give effect to the regulations under which it was created.

(iii) *Wheat Acquired and Disposed.*—(a) *Wheat Acquired.* Particulars of wheat acquired by the Australian Wheat Board up to 1st July, 1944, are shown in the following table :—

**AUSTRALIAN WHEAT BOARD.—WHEAT ACQUIRED TO 1st JULY, 1944.**  
'000 Bushels.

Pool.	Harvest.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
	Balance.							
1 ..	1938-39	6,226	2,805	" ..	5,884	2,925	..	17,840
2 and 3 ..	1939-40	66,689	46,960	6,255	38,130	37,370	41	195,445
4 ..	1940-41	16,919	9,985	5,287	13,818	17,575	75	63,659
5 ..	1941-42	41,236	48,157	2,680	27,740	34,077	78	153,968
6 ..	1942-43	44,783	40,864	4,403	34,687	17,983	22	142,742
7 ..	1943-44	40,965	17,292	4,590	18,143	13,845	55	94,890
Total to 1st July, 1944 ..		216,818	166,063	23,215	138,402	123,775	271	668,544

(b) *Wheat Disposal.* Details relating to the disposal of this wheat are shown in the following table :—

**AUSTRALIAN WHEAT BOARD.—DISPOSAL OF WHEAT TO 1st JULY, 1944.**  
'000 Bushels.

Particulars.	To 31st December, 1940.	1st January to 31st December, 1941.	1st January to 31st December, 1942.	1st January to 31st December, 1943.	1st January to 1st July, 1944(a).	Total to 1st July, 1944.
Sold for export as wheat ..	91,610	6,862	21,169	20,053	36,218	175,912
Sold for export as flour ..	46,917	20,198	9,738	20,159	42,703	139,715
Sold for local consumption as flour ..	36,301	31,933	32,639	34,872	17,052	152,797
Sold for all other purposes ..	12,002	12,011	14,718	20,919	18,536	78,186

(a) Includes Sales to the British Government not yet shipped.

Owing to war-time conditions a great proportion of sales of wheat and flour for export was made in large quantities to the British Government. The Board has shipped a total of 165,851,000 bushels of wheat, and, in addition, has shipped on its own account (i.e., not including Millers' shipments), 1,339,000 long tons of flour.

(iv) *Finance.* Under the terms of the Wheat Acquisition Regulations the Minister is empowered to arrange with the Commonwealth Bank for advances to the Board. These advances are guaranteed by the Commonwealth Government.

**AUSTRALIAN WHEAT BOARD.—FINANCIAL OPERATIONS TO 1st JULY, 1944.**

Particulars.	No. 2 Pool.	No. 4 Pool.	No. 5 Pool.	No. 6 Pool.	No. 7 Pool.
	£	£	£	£	£
Paid to growers .. ..	31,352,742	11,069,035	25,936,789	25,824,715	17,385,560
Rail freight .. ..	3,778,993	1,201,125	3,030,968	2,367,281	312,859
Expenses .. ..	3,558,982	1,379,594	3,972,305	2,592,031	1,626,792
Total Payments ..	38,690,717	13,649,754	32,940,062	30,784,027	19,325,211
Value of sales delivered ..	37,790,637	12,932,282	33,000,954	13,528,012	3,706,068
Value of flour tax .. ..	900,080	992,614	1,093,343	1,127,283	940,000

(v) *Advances to Growers.*—(a) *Pools Nos. 1 to 5.* The advances made to growers to 1st July, 1944, in each of the first five pools are shown in the following table :—

**ADVANCES MADE TO GROWERS TO 1st JULY, 1944.**

Particulars.	Amount Paid (f.o.b. Basis).		Amount Paid. (Trucks Terminal Port Basis).					
	No. 1 Pool.		No. 2 Pool.		No. 4 Pool.		No. 5 Pool.	
	Per Bushel.	Total.	Per Bushel.	Total.	Per Bushel.	Total.	Per Bushel.	Total.
	s. d.	£'000.	s. d.	£'000.	s. d.	£'000.	s. d.	£'000.
Advance made to								
Growers—								
1st Payment (a)—								
Bulk ..	2 0	1,784	2 8.50	27,350	2 10.50	9,330	2 10	22,432
Bagged ..	2 0		2 10.50		3 0		3 0	
2nd Payment—								
Bulk ..	0 6	501	0 4	3,257	0 4	1,061	0 3	1,925
Bagged ..	0 8		0 4		0 4		0 3	
3rd Payment—								
Bulk ..	0 1.75	130	0 3	2,442	0 3	795	0 4	2,566
Bagged ..	0 1.75		0 3		0 3		0 4	
4th Payment—								
Bulk ..	0 0.158	12	0 1.125	916	0 3	793	0 3	1,925
Bagged ..	0 0.158		0 1.125		0 3		0 3	
5th Payment—								
Bulk ..	..	..	0 1.333	1,086	0 0.75	259	..	..
Bagged ..	..	..	0 1.333		0 1.25		..	
Total—								
Bulk ..	2 7.908	2,427	3 5.958	35,051	3 9.25	12,238	3 8.0	28,848
Bagged ..	2 9.908		3 7.958		3 11.25		3 10.0	

(a) From which rail freight was deducted.  
bushel less.

(b) No. 3 Pool in New South Wales equals 3d. per

(b) *Pools Nos. 6 and 7.* The Wheat Acquisition Regulations, 1939, provide that the Minister for Commerce and Agriculture shall determine the compensation to be paid for wheat acquired by the Commonwealth. During the seasons 1939-40 to 1941-42, an initial payment of compensation was made as wheat was acquired and further payments were made as the realization of the various pools progressed. In August, 1942, the Government gave approval to the proposal to guarantee to wheat-growers compensation at a fixed rate on the first 3,000 bushels delivered by each (known as quota wheat), while on the remainder of deliveries (non-quota) compensation at a lower rate would be paid as the wheat was acquired and further payments made as warranted by realizations.

A quota was allotted to each wheat-grower by the Wheat Industry Stabilization Board and, on the wheat delivered by him to the extent of his quota, the grower received the guaranteed payment.

The quota allotted to the majority of wheat-growers was for 3,000 bushels but, in certain instances, growers who operate under a share farming agreement, either as owners or share farmers, or who farm under family arrangements, received a quota of less than 3,000 bushels.

For the 1942-43 season (No. 6 Pool) the guarantee was 4s. per bushel at country stations for bagged wheat, and 3s. 10d. for bulk wheat, while deliveries in excess of quota received an initial payment of 2s. per bushel for bagged wheat and 1s. 10d. per bushel for bulk wheat. Since then, a second payment of compensation on non-quota wheat at the rate of 1s. per bushel has been made.

Payment of initial compensation on wheat acquired for the 1943-44 season (No. 7 Pool) was on the same basis, although the payment on both quota and non-quota wheat was increased by 1½d. per bushel, this amount being the estimated increased cost for harvesting the 1943-44 crop due to the introduction of an Industrial Award for labour employed for this purpose.

The advances made to growers to 1st July, 1944, and proportions of quota and non-quota wheat received in the 1942-43 and 1943-44 seasons were as follows:—

**ADVANCES MADE TO GROWERS TO 1st JULY, 1944.**

Particulars.	Amount Paid (Net at Sidings).				Percentage of Total Wheat Received.		
	No. 6 Pool.		No. 7 Pool.		No. 6 Pool.	No. 7 Pool.	
	s. d.	£'000.	s. d.	£'000.	%	%	
Quota Wheat—							
Bulk .. ..	3 10	19,572	3 11½	15,683	70	82	
Bagged .. ..	4 0		4 1½				
Non-quota Wheat—							
First Payment—							
Bulk .. ..	1 10	4,110	1 11½	1,722	30	18	
Bagged .. ..	2 0		2 1½				
Second Payment—							
Bulk .. ..	1 0	2,142	..	..			
Bagged .. ..	1 0		..				
Total—Non-quota Wheat—							
Bulk .. ..	2 10	6,252	1 11½	1,722	30	18	
Bagged .. ..	3 0		2 1½				
Total Wheat .. ..	..	25,824	..	17,405	100	100	

15. **Special Tabulation of Wheat Holdings.**—With the co-operation of the State Statisticians an extensive analysis was made of the returns collected at the annual agricultural census of 1935-36 in respect of all holdings growing wheat for grain in the principal producing States. The results are published in the Official Year Book No. 33, pp. 374 to 377.

## § 5. Oats.

1. **Progress of Cultivation.**—(i) *Area and Production.* Oats are usually next in importance to wheat amongst the grain crops cultivated in Australia, but while wheat grown for grain accounted for 53.28 per cent., oats represented only 8.60 per cent. of the area of crops in 1942-43. The acreage and production of oats for the last five years are shown in the following table:—

### OATS : AREA AND PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Australia.
AREA ('000 ACRES).								
1938-39.. ..	399	658	9	267	426	25	..	1,784
1939-40.. ..	405	439	12	349	453	23	I	1,682
1940-41.. ..	237	559	7	473	429	18	..	1,723
1941-42.. ..	304	422	8	291	407	27	I	1,460
1942-43.. ..	431	428	19	263	343	13	..	1,497
Average 10 seasons ended 1942-43 ..	299	482	9	332	411	25	..	1,558
PRODUCTION ('000 BUSHELS).								
1938-39.. ..	4,831	2,909	93	2,401	4,668	645	7	15,554
1939-40.. ..	6,904	8,281	200	4,063	5,315	529	10	25,302
1940-41.. ..	1,996	2,624	76	1,829	3,250	416	8	10,199
1941-42.. ..	4,118	8,149	67	3,800	5,325	839	4	22,302
1942-43.. ..	7,338	6,638	277	3,365	3,612	292	10	21,532
Average 10 seasons ended 1942-43 ..	4,432	5,843	109	2,766	4,273	697	7	18,127



The oat crop showed considerable variation during the past decennium, ranging from 10,199,000 bushels in 1940-41 to 25,302,000 bushels in 1939-40 with an average for the period of 18,127,000 bushels. The record yield of oats was obtained during 1939-40, when 25,301,980 bushels were harvested. The demand for the grain for oatmeal varies from 1½ million bushels to 2 million bushels annually. The cereal is mainly used as feed grain, and its value, particularly in good seasons, does not warrant an extension of area.

The principal oat-growing State is Victoria, which produces on the average almost one-third of the total quantity grown in Australia. Considerable quantities are produced in the other States. In Queensland, however, the area sown to this cereal is very small.

(ii) *Average Yield.* The average yield per acre of oats varies considerably in the different States, being highest in Tasmania and lowest in South Australia. Averages for each of the last five seasons, and for the decennium ended 1942-43 are given in the following table :—

#### OATS : AVERAGE YIELD PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1938-39 .. ..	12.09	4.42	10.77	8.99	10.95	25.97	21.95	8.72
1939-40 .. ..	17.04	18.84	17.23	11.64	11.74	22.91	15.77	15.04
1940-41 .. ..	8.42	4.69	10.61	3.87	7.57	23.73	20.84	5.92
1941-42 .. ..	13.55	19.31	8.29	13.04	13.08	30.73	5.56	15.27
1942-43 .. ..	17.01	15.51	14.49	12.81	10.55	22.19	23.29	14.38
Average for 10 seasons ended 1942-43 ..	14.70	12.82	12.34	8.73	10.47	27.10	21.44	11.76

The smallest average yield per acre ever recorded for Australia was that experienced in the abnormally dry season 1914-15, namely, 5.60 bushels, while the largest in the last ten years was that of the season 1932-33, amounting to 15.73 bushels per acre.

2. *World's Production.*—The world's production of oats for the year 1938, as compiled by the International Institute of Agriculture, amounted to 3,704 million bushels. This quantity was harvested from 136 million acres, and represents an average yield of 27.24 bushels per acre. In comparison with this average return per acre, that of Australia for the same period (8.72 bushels) appears very small. Yields in excess of 40 bushels per acre are not uncommon and some European countries record averages in excess of 50 bushels per acre. The following table shows the world's production and average yield for the quinquennium 1928-32 and for each of the six years ended 1938 which is the latest available :—

#### OATS : WORLD'S PRODUCTION.

Year.	Area.	Production.	Average Yield per Acre.
	Million Acres.	Million Bushels.	Bushels.
Average 1928-1932 .. ..	146	3,670	25.13
1933 .. ..	139	3,365	24.09
1934 .. ..	136	3,222	23.69
1935 .. ..	146	3,732	25.56
1936 .. ..	137	3,290	24.01
1937 .. ..	138	3,605	26.12
1938 .. ..	136	3,704	27.24

3. Price of Oats.—The average wholesale prices in the Metropolitan markets for the year 1940-41, the latest available, are given in the following table :—

#### OATS : AVERAGE WHOLESALE PRICES, 1940-41.

Particulars.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Average price per bushel ..	3 3½	3 2½	4 5½	2 8½	2 7	4 1

4. Imports and Exports.—The production of oats in Australia is sufficient to admit of a regular export trade. The quantities and values of oats imported into and exported from Australia during the years 1938-39 to 1942-43 are given hereunder :—

#### OATS : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.(a)	Quantity.	Value.(a)	Quantity.	Value.(a)
	Bushels.	£.	Bushels.	£.	Bushels.	£.
1938-39 ..	10,428	2,762	117,347	18,866	106,919	16,104
1939-40 ..	2,553	1,033	266,068	35,850	263,515	34,817
1940-41 ..	1,943	747	159,907	25,339	157,964	24,592
1941-42 ..	2,558	959	78,157	16,418	75,599	15,459
1942-43 ..	1,045	350	284,113	57,075	283,068	56,725

(a) Australian currency values.

The quantity of oats imported into Australia is usually not very large, although in 1927-28 imports exceeded exports by 460,581 bushels. New Zealand is the chief supplier. The principal countries to which oats were exported during pre-war years were the United Kingdom, New Zealand, Malaya (British), Ceylon, India and Mauritius.

5. Oatmeal, etc.—The production of oatmeal in Australia during 1942-43 amounted to 455,334 cwt., much of which is consumed locally, the quantity of oats used for oatmeal being 2,334,889 bushels, or about 6 per cent. of the total production. Oversea trade in this and similar products is small; the exports of oatmeal, wheatmeal and rolled oats during 1942-43 amounted to 194,855 cwt. There were no imports during the year.

6. Value of Oat Crop.—The estimated values of the oat crop for the seasons 1941-42 and 1942-43 were as follows :—

#### OATS : VALUE OF CROP,(a) 1941-42 and 1942-43.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
	£	£	£	£	£	£	£	£
1941-42.								
Aggregate value ..	566,240	1,052,615	14,411	409,601	471,525	181,700	557	2,696,649
Value per acre ..	£1/17/3	£2/9/11	£1/15/8	£1/8/1	£1/3/2	£6/13/2	£0/15/3	£1/16/11
1942-43.								
Aggregate value ..	1,009,000	940,375	54,196	396,254	447,736	61,920	1,308	2,910,789
Value per acre ..	£2/6/9	£2/3/11	£2/16/9	£1/10/2	£1/6/2	£4/14/1	£3/3/10	£1/18/11

(a) Excludes the value of straw.

### § 6. Maize.

1. States Growing Maize.—Maize is grown for grain chiefly in Queensland and New South Wales, the area so cropped in these States during the 1942-43 season being 277,407 acres, or 97 per cent. of the total for Australia. Of the balance, Victoria contributed 7,131 acres, Western Australia 46 acres. The climate of Tasmania is unsuitable for the growing of maize for grain. In the States mentioned the crop is grown to a greater or lesser extent for green fodder, particularly in connexion with the dairying industry.

2. **Progress of Cultivation.**—(i) *Area and Production.* Although maize is grown extensively in other countries, the area sown to maize in Australia has averaged only 312,000 acres during the past decennium. Compared with the previous year, the area in 1942-43 decreased by 16,768 acres, but the acreage sown was considerably less than the comparatively large areas of 414,914 and 400,544 acres sown respectively in 1910-11 and 1927-28.

The area and production of maize for grain in each State for the last five years and the average for the decennium ended 1942-43 are given in the following table:—

### MAIZE : AREA AND PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	N.T.	A.C.T.	Australia.
<b>AREA.</b>								
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1938-39..	122,201	18,485	183,415	37	8	..	..	324,146
1939-40..	115,856	18,963	176,844	39	110	..	..	311,812
1940-41..	142,147	15,382	205,310	22	10	..	..	362,871
1941-42..	117,262	9,594	174,450	16	38	..	..	301,360
1942-43..	103,591	7,131	173,816	..	46	..	8	284,592
Average 10 seasons ended 1942-43 ..	119,503	16,919	175,427	19	30	..	7	311,905

### PRODUCTION ('000 omitted).

	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1938-39..	2,905	417	3,733	2	..	..	..	7,057
1939-40..	2,833	381	3,345	..	1	..	..	6,560
1940-41..	4,044	703	4,444	1	1	..	..	9,193
1941-42..	3,141	306	3,989	..	..	..	..	7,436
1942-43..	2,815	271	3,798	..	1	..	..	6,885
Average 10 seasons ended 1942-43 ..	3,214	566	3,646	..	..	..	..	7,426

The greatest production of maize in Australia was recorded in 1910-11, when it amounted to over 13,000,000 bushels. The production in 1940-41 amounted to 9,193,000 bushels declining to 6,885,000 bushels in 1942-43, the average for the decennium ended 1942-43 being 7,426,000 bushels.

(ii) *Average Yield.* The following table gives particulars of the average yields per acre of the maize crops of the States for the seasons 1938-39 to 1942-43 and for the decennium ended 1942-43:—

### MAIZE : AVERAGE YIELD PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	N. Terr.	A.C.T.	Aust.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1938-39 ..	23.77	22.54	20.36	41.35	11.25	..	..	21.77
1939-40 ..	24.45	20.08	18.91	3.54	14.24	..	..	21.04
1940-41 ..	28.45	45.70	21.65	40.91	42.90	..	..	25.33
1941-42 ..	26.79	31.88	22.86	21.00	7.18	..	..	24.67
1942-43 ..	27.17	38.05	21.85	..	16.24	..	6.00	24.19
Average for 10 seasons ended 1942-43 ..	26.90	33.44	20.78	24.93	13.35	..	8.11	23.81

The average for Victoria is generally amongst the highest in the world, being, for the last three years 50 per cent. higher than for the rest of Australia. The area, however, is comparatively small and is situated in specially favourable districts. The average for New South Wales is generally higher than that for Queensland.



(iii) *Production per Acre—Various Countries.* The average for Australia for the past 10 years was 23.81 bushels per acre. During the period 1928-32 the United States of America averaged 25.1 bushels, Argentine Republic 30.7 bushels, Rumania 17.7 bushels, and the U.S.S.R. (Russia) 14.0 bushels per acre.

3. *World's Production.*—The following table furnishes particulars of the world's acreage, production and average yield per acre of maize for the latest available period according to the data compiled by the International Institute of Agriculture :—

MAIZE : WORLD'S PRODUCTION.

Year.					Area.	Production.	Average Yield per Acre.
					Million Acres.	Million Bushels.	Bushels.
Average 1928-1932 .. .. .					204	4,449	21.81
1934 .. .. .					201	3,669	18.25
1935 .. .. .					201	4,299	21.39
1936 .. .. .					200	3,700	18.50
1937 .. .. .					196	4,617	23.56
1938 .. .. .					196	4,547	23.20

The United States of America is the most important maize-producing country in the world. Approximately 100,000,000 acres are planted there annually, and in normal seasons more than 2,000 million bushels are reaped, representing about 50 per cent. of the world's production. About 85 per cent. of the production is fed to live stock on farms, 10 per cent. is used for human food, and only a very small fraction—less than 1 per cent.—is exported.

4. *Price of Maize.*—The average wholesale price of maize in the Sydney or Melbourne market for each of the last five years is given in the following table :—

MAIZE : AVERAGE PRICE,

Particulars.	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.
	s. d.	s. d.	s. d.	s. d.	s. d.
Average price per bushel ..	(a) 4 7½	(a) 5 2	(b) 4 4½	(b) 7 4½	(b) 8 0

(a) Sydney.

(b) Melbourne.

5. *Oversea Imports and Exports.*—The imports of maize into Australia during the five years ended 1942-43 were negligible, averaging 17,000 bushels compared with nearly 600,000 bushels during the five years ended 1929-30. Details of imports and exports for the years 1938-39 to 1942-43 are as follows :—

MAIZE : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Imports.	
	Quantity.	Value.(a)	Quantity.	Value.(a)	Quantity.	Value.(a)
	Bushels.	£	Bushels.	£	Bushels.	£
1938-39.. ..	54	55	282,018	41,489	-281,964	-41,434
1939-40.. ..	75,123	13,864	5,013	1,317	70,110	12,547
1940-41.. ..	61	154	779	401	-718	-247
1941-42.. ..	80	11	1,623	456	-1,543	-445
1942-43.. ..	9,305	2,377	1,418	546	7,887	1,831

NOTE.—The minus sign (—) denotes net exports.

(a) Australian currency values.

6. **Maize Products.**—A small quantity of cornflour is imported annually into Australia, the principal countries of supply being the United Kingdom, Union of South Africa and the United States of America. During the year 1929-30 the imports amounted to 702,062 lb., and represented a value of £7,956, but since then they have been unimportant. Exports from Australia in 1942-43 amounted to 2,129,691 lb., valued at £44,070.

7. **Value of Crops.**—The values of the crops for the seasons 1941-42 and 1942-43 were as follows :—

**MAIZE : VALUE OF CROP, 1941-42 and 1942-43.**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Australia.
	£	£	£	£	£	£
1941-42.						
Aggregate value ..	654,510	119,518	857,996	110	152	1,632,286
Value per acre ..	£5/11/8	£12/9/2	£4/18/4	£6/17/6	£4/0/0	£5/8/4
1942-43.						
Aggregate value ..	961,710	101,745	1,186,951	..	526	22,250,948
Value per acre ..	£9/5/8	£14/5/4	£6/16/7	..	£11/8/8	£7/18/2

(a) Includes Australian Capital Territory. Value £16; value per acre £2.

## § 7. Barley.

1. **Progress of Cultivation.**—(i) *Area and Production.* Despite wide annual fluctuations the area sown to barley has expanded considerably during the past ten years; the average annual area sown for the decennium ended 1942-43 amounted to 615,000 acres, compared with an average of 356,116 acres for the previous ten years. Victoria was originally the principal barley-growing State, but since 1913-14 South Australia has been the chief producing State, accounting for 66 per cent. of the Australian acreage in 1942-43. Victoria was next in importance with 17 per cent., leaving a small balance of about 17 per cent. distributed among the other States. The totals here given relate to the areas harvested for grain; small areas only are sown for hay, but more considerable quantities are cut for green forage. These, however, are not included in this section. The area and production of barley for grain in the several States for the last five years and the average for the decennium ended 1942-43 are shown in the following table :—

**BARLEY : AREA AND PRODUCTION.**

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
<b>AREA ('000 Acres).</b>							
1938-39.. ..	14	176	14	457	75	9	745
1939-40.. ..	24	204	13	504	83	8	836
1940-41.. ..	20	188	7	471	65	6	757
1941-42.. ..	21	204	8	478	68	5	784
1942-43.. ..	14	78	8	298	50	3	451
Average 10 seasons ended 1942-43 ..	15	140	9	394	51	6	615
<b>PRODUCTION ('000 Bushels).</b>							
1938-39.. ..	218	1,672	246	7,541	946	208	10,831
1939-40.. ..	466	3,738	270	9,960	971	196	15,601
1940-41.. ..	176	1,187	122	4,776	725	147	7,133
1941-42.. ..	304	4,792	117	11,714	959	118	18,004
1942-43.. ..	223	1,274	165	6,020	533	63	8,278
Average 10 seasons ended 1942-43 ..	230	2,333	148	7,035	615	172	10,533

South Australia and Victoria were the only States producing more than 1,000,000 bushels on the average during the past decade, the yields being respectively 7,035,000 and 2,333,000 bushels.

(ii) *Malting and Other Barley.* (a) Year 1942-43. Particulars for the season 1942-43 are as follows:—

### BARLEY-MALTING AND OTHER: AREA AND PRODUCTION, 1942-43.

('000 omitted.)

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Malting barley ..	5	62	6	261	20	3	357
Other barley ..	9	16	2	37	30	..	94
<b>Total</b> ..	<b>14</b>	<b>78</b>	<b>8</b>	<b>298</b>	<b>50</b>	<b>3</b>	<b>351</b>
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Malting barley ..	80	998	116	5,331	203	54	6,782
Other barley ..	143	276	49	689	330	9	1,496
<b>Total</b> ..	<b>223</b>	<b>1,274</b>	<b>165</b>	<b>6,020</b>	<b>533</b>	<b>63</b>	<b>8,278</b>

Taking Australia as a whole, about 79 per cent. of the area of barley in 1942-43 was sown with malting or English Barley while the remainder consisted of Cape and other varieties. The proportion, however, varied largely in the several States. The disposal of barley during the seasons 1942-43 and 1941-42 (in brackets) were as follows: malt works, 3,613,086 (3,943,669) bushels; flour and other grain mills, 360,300 (278,691) bushels; distilleries, 146,217 (77,940) bushels; exports, 511,382 (1,034,388) bushels; leaving a balance of 3,646,000 (12,669,000) bushels for feed and seed.

(b) *Progress of Cultivation.* The following table sets out the acreage and production of malting and other barley in Australia during the last five seasons and the decennium ended 1942-43:—

### BARLEY-MALTING AND OTHER: AREA AND PRODUCTION, AUSTRALIA.

Season.	'000 Acres.			'000 Bushels.			Average Yield per Acre.		
	Malting.	Other.	Total.	Malting.	Other.	Total.	Malting.	Other.	Total.
							Bus.	Bus.	Bus.
1938-39 ..	650	95	745	9,705	1,126	10,831	14.92	11.92	14.54
1939-40 ..	716	120	836	13,732	1,869	15,601	19.19	15.56	18.67
1940-41 ..	639	118	757	6,185	948	7,133	9.68	8.01	9.42
1941-42 ..	662	122	784	15,713	2,291	18,004	23.72	18.81	22.96
1942-43 ..	357	94	451	6,782	1,496	8,278	19.03	15.88	18.37
Average 10 seasons ended 1942-43 ..	523	92	615	9,172	1,361	10,533	17.52	14.80	17.13

During the past ten seasons the area and production of malting barley have approximated six times the corresponding figures for other barley. The average yield per acre differs very little in respect of the two classes, the results for the last ten-yearly period being slightly in favour of the malting variety.



(iii) *Average Yield.* The average yield of barley per acre varies considerably in the different States, being as a rule highest in Tasmania and Victoria, and lowest in Western Australia. Details for each State during the last five seasons, and for the decennium ended 1942-43 are given in the following table :—

### BARLEY : YIELD PER ACRE.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1938-39 .. ..	15.34	9.50	17.56	16.50	12.63	23.94	14.54
1939-40 .. ..	19.19	18.30	20.42	19.78	11.74	25.33	18.67
1940-41 .. ..	8.74	6.33	16.92	10.14	10.53	26.08	9.42
1941-42 .. ..	14.75	23.45	15.78	24.49	14.03	22.11	22.96
1942-43 .. ..	8.62	16.36	19.90	20.20	7.76	23.04	18.37
Average for 10 seasons ended 1942-43 ..	15.59	16.66	16.39	17.85	12.08	26.36	17.13

2. *Australian Barley Board.*—The Australian barley crops for the seasons 1939-40 and 1940-41 were acquired by the Australian Barley Board, which was created under the National Security Act 1939-1943. For the season 1941-42 and those following, the acquisition was restricted to the main producing States of South Australia and Victoria.

Particulars of the barley acquired, sold, and advances made to growers are given in the following table :—

### BARLEY ACQUIRED, SOLD, ETC., AT JULY, 1944.

Particulars.	No. 1 Pool (1939-40 Crop).	No. 2 Pool (1940-41 Crop).	No. 3 Pool (1941-42 Crop).	No. 4 Pool(a) (1942-43 Crop).	No. 5 Pool(a) (1943-44 Crop).
Quantity acquired '000 bus.	11,616	4,173	12,715	3,810	3,338
Quantity sold .. ..	11,616	4,143	(b)12,831	3,480	1,096
Total advances made per bushel on 2-row, No. 1 Grade .. ..	s. d. 3 3-49	s. d. 4 3-48	s. d. 3 5-05	s. d. 3 8	s. d. 3 6
	£	£	£	£	£
Total Payments to Growers	1,528,402	852,321	2,025,155	603,736	493,231

(a) Pool not yet finalized.

(b) Includes surplus in outturn.

3. *Comparison with Other Countries.*—In comparison with the barley production of other countries, that of Australia appears extremely small. Particulars for some of the leading countries during 1938 were as follows :—United States of America, 242 million bushels; Germany, 187 million bushels; Turkey, 106 million bushels; and Canada, 98 million bushels. Details of production in the U.S.S.R. (Russia) are not available but in 1935 production approximated 360 million bushels, while China produced 281 million bushels in 1937. Later details are not available.

4. **World's Production.**—The following table shows the latest available details of the world's acreage of barley, together with the production and average yield per acre, according to the results compiled by the International Institute of Agriculture :—

**BARLEY : WORLD'S PRODUCTION.**

Period.					Area.	Production.	Average Yield per Acre.
					Million Acres.	Million Bushels.	Bushels.
Average 1928-1932 .. .. .					91.1	1,809	19.85
1934 .. .. .					87.2	1,663	19.07
1935 .. .. .					94.0	1,845	19.63
1936 .. .. .					89.7	1,744	19.44
1937 .. .. .					91.7	1,820	19.85
1938 .. .. .					90.7	1,915	21.11

5. **Prices.**—The average prices in the Melbourne market during each of the last five years are given in the following table :—

**BARLEY : AVERAGE MELBOURNE PRICES PER BUSHEL.**

Particulars.			1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
			s. d.	s. d.	s. d.	s. d.	s. d.
Malting barley .. .. .	..	..	3 5 $\frac{3}{4}$	3 5	4 8 $\frac{1}{2}$	5 0 $\frac{3}{4}$	4 11
Cape barley .. .. .	..	..	2 11 $\frac{1}{2}$	3 0	3 11 $\frac{1}{2}$	4 3 $\frac{3}{4}$	4 3

6. **Imports and Exports.**—Australian exports of barley during the last five years averaged 1,793,000 bushels, South Australia being the principal exporting State. Particulars of the Australian overseas imports and exports for the last five years are shown in the following table :—

**BARLEY : IMPORTS AND EXPORTS, AUSTRALIA.**

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.(a)	Quantity.	Value.(a)	Quantity.	Value.(a)
	'000 Bushels.	£	'000 Bushels.	£	'000 Bushels.	£
1938-39 .. .. .	..	24	2,618	341,935	2,618	341,911
1939-40 .. .. .	I	85	3,891	520,521	3,890	520,436
1940-41 .. .. .	I	220	913	141,343	912	141,123
1941-42 .. .. .	I	222	1,034	171,690	1,033	171,468
1942-43 .. .. .	..	..	511	63,846	511	63,846

(a) Australian currency values.

In addition to barley grain, there is also an export of Australian pearl and scotch barley, the total for 1942-43 amounting to 1,665,710 lb., valued at £19,436 consigned mainly to Ceylon and Southern Rhodesia.

7. **Imports and Exports of Malt.**—In the years before the War of 1914-1919 the imports of malt into Australia were fairly extensive, the supply being obtained principally from the United Kingdom. Subsequently, however, imports had practically ceased and the 9,695 bushels imported in 1942-43 was the largest since 1915-16. The production

of malt in Australia is more than sufficient to meet local requirements and the surplus is shipped chiefly to the Far East and New Zealand. Details of imports and exports for the five years ended 1942-43 are given in the next table :—

### MALT : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.(a)	Quantity.	Value.(a)	Quantity.	Value.(a)
	Bushels.	£	Bushels.	£	Bushels.	£
1938-39 ..	140	91	137,473	49,552	137,333	49,461
1939-40 ..	170	123	320,410	111,499	320,240	111,376
1940-41 ..	7	12	517,240	198,141	517,233	198,129
1941-42 ..	1,155	639	314,177	132,949	313,022	132,310
1942-43 ..	9,695	1,299	15,588	4,895	5,893	3,596

(a) Australian currency values.

8. Value of Barley Crop.—The estimated value of the barley crop for the seasons 1941-42 and 1942-43 and the value per acre are shown in the following table :—

### BARLEY : VALUE OF CROP,(a) 1941-42 and 1942-43.

Value.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1941-42.							
Total ..	73,940	788,047	23,480	1,604,222	161,367	30,020	2,681,076
Per acre..	£3/11/10	£3/17/2	£3/3/2	£3/7/1	£2/7/2	£5/12/11	£3/8/4
1942-43.							
Total ..	51,430	281,222	26,416	890,164	108,989	16,330	1,374,551
Per acre	£3/11/11	£3/12/3	£3/3/11	£2/19/9	£2/4/0	£5/19/9	£3/1/0

(a) Excludes the value of straw.

## § 8. Rice.

Experimental rice cultivation was carried on at the Yanco Experimental Farm in New South Wales for a number of years, but it was not until 1924-25 that an attempt was made to grow the crop on a commercial basis. In that year production amounted to 16,240 bushels from 153 acres, or an average of 106 bushels per acre. Favoured by tariff protection and high average yields the development of rice culture in the Murrumbidgee Irrigation Area made rapid progress, and production was equal to Australian requirements. Consequent upon the outbreak of war in the Pacific and the enemy occupation of the rice producing countries north of Australia, the demand for rice was so great as to be beyond the capacity of the industry. Civilian consumption was prohibited except in the case of Asiatics resident in Australia and the total production was diverted to service needs and for the feeding of natives in South-West Pacific Area.

The area which growers may plant is subject to control. Each year representatives of the Rice Marketing Board, Rice Growers, the Department of Agriculture and the Water Conservation and Irrigation Commission of New South Wales meet to decide the maximum area which growers may plant in the following season. Because of war-time



demands the areas sown have been expanded. The extent of any expansion is determined by the limits imposed by the quantity of water available. The expansion in 1942-43 was achieved in the Murrumbidgee Irrigation Area, but in 1943-44, an additional 5,000 acres in the Wakool Irrigation Area was anticipated.

During the past five years an annual average of 262,000 centials of cleaned and 10,700 centials of uncleaned rice has been exported from Australia, mainly to the United Kingdom, New Zealand, Canada and the Pacific Islands.

Details relating to area, production, trade and price, since 1934-35 are shown in the following table :—

RICE : AREA, PRODUCTION, TRADE AND PRICE, AUSTRALIA.

Year.	No. of Growers. (a)	Area.	Production Paddy Rice.	Average Yield.	Imports.		Exports.		Weighted Average Retail Price.
					Un-cleaned.	Cleaned.	Un-cleaned.	Cleaned.	
		Acres.	Bushels.	Bushels.	Centals.	Centals.	Centals.	Centals.	per lb.
1934-35 ..	290	21,746	1,888	88.84	67	37,725	28,618	235,872	3.22
1935-36 ..	304	21,715	2,164	99.64	963	41,697	9,820	215,793	3.27
1936-37 ..	320	23,384	2,277	97.36	26	32,605	2,137	320,893	3.07
1937-38 ..	319	23,737	2,269	95.59	9,535	33,315	2,825	308,844	3.09
1938-39 ..	313	23,533	2,775	117.92	29	46,019	3,386	277,851	3.24
1939-40 ..	314	24,120	1,858	77.02	5	29,765	2,554	326,267	3.44
1940-41 ..	329	24,547	2,240	91.26	..	25,722	5,188	223,416	3.47
1941-42 ..	331	23,633	2,192	92.75	660	36,737	5,475	271,995	3.51
1942-43 ..	348	34,232	3,084	90.11	..	1,800	37,085	209,628	(b) 3.51

(a) New South Wales.

(b) Nominal.

The production from several small experimental plots in States other than New South Wales is included in the foregoing table, but the quantity is negligible.

## § 9. Other Grain and Pulse Crops.

In addition to the grain crops already specified, the principal other grain and pulse crops grown in Australia are beans, peas and rye. The total area of the first two mentioned crops for the season 1942-43 was 76,654 acres, giving a yield of 938,485 bushels, or an average of 12.24 bushels per acre, which was less than the average yield for the decennium ended 1942-43, namely 13.29 bushels per acre. Beans and peas are grown chiefly in Tasmania, South Australia and Victoria. Peas are exported in considerable quantities to the United Kingdom, the chief exporting State being Tasmania. The total area of rye in Australia during the season 1942-43 was 21,865 acres, yielding 171,700 bushels, or an average of 7.85 bushels per acre, as compared with the average of 10.33 bushels for the last ten seasons. Of the total area sown to rye in 1942-43, about 3.5 per cent. was in New South Wales, 57.8 per cent. was located in South Australia, and 20.2 per cent. in Victoria.

## § 10. Potatoes.

1. Progress of Cultivation.—(i) Area and Production. Victoria possesses peculiar advantages for the growth of potatoes, as the rainfall is generally satisfactory, and the climate is unfavourable to the spread of Irish blight; consequently the crop is widely grown. The principal areas are the central highlands, the south-western and Gippsland districts. Tasmania comes next in order of acreage sown, but the production exceeded that of Victoria in 1938-39 and 1939-40. New South Wales occupies third place in acreage and production. The area for these three States accounted for 81.85 per cent. of the total for Australia in 1942-43.

The area and production of potatoes in each State during the last five years and the average for the decennium ended 1942-43 are given hereunder :—

### POTATOES : AREA AND PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	A.C.T.	Australia.
AREA.								
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1938-39 ..	16,866	34,396	10,389	4,290	5,355	26,696	56	98,048
1939-40 ..	19,232	32,177	12,446	4,499	5,676	30,452	52	104,534
1940-41 ..	17,836	44,195	12,586	4,840	6,118	37,364	51	122,990
1941-42 ..	17,685	33,392	8,151	4,783	4,643	30,640	30	99,324
1942-43 ..	24,488	51,757	9,885	7,233	6,399	40,383	64	140,209
Average 10 seasons ended								
1942-43 ..	20,488	44,089	11,455	4,979	5,017	34,257	46	120,331
PRODUCTION.								
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1938-39 ..	39,385	81,415	19,183	18,487	26,532	89,330	109	274,441
1939-40 ..	40,531	87,931	28,306	21,251	30,761	114,409	128	323,317
1940-41 ..	50,388	216,568	21,745	25,583	31,487	114,041	177	459,989
1941-42 ..	38,634	118,454	16,220	24,142	25,329	109,850	98	332,727
1942-43 ..	64,728	195,138	22,438	32,866	32,246	135,930	215	483,561
Average 10 seasons ended								
1942-43 ..	50,320	138,082	20,262	22,300	25,750	103,918	120	360,752

The area sown to potatoes averaged 141,000 acres during the ten years ended 1932-33, but it has declined to an average of 120,000 acres during the past decade. Victoria, with a drop of 20,000 acres, was mainly responsible for this decline, followed by Tasmania with 2,000 acres. A small increase occurred in South Australia and New South Wales, while in Queensland the increase amounted to 1,700 acres or 18 per cent.

The greatest yield during the past decade was 483,561 tons in 1942-43, compared with the record output of 507,153 tons in 1906-7.

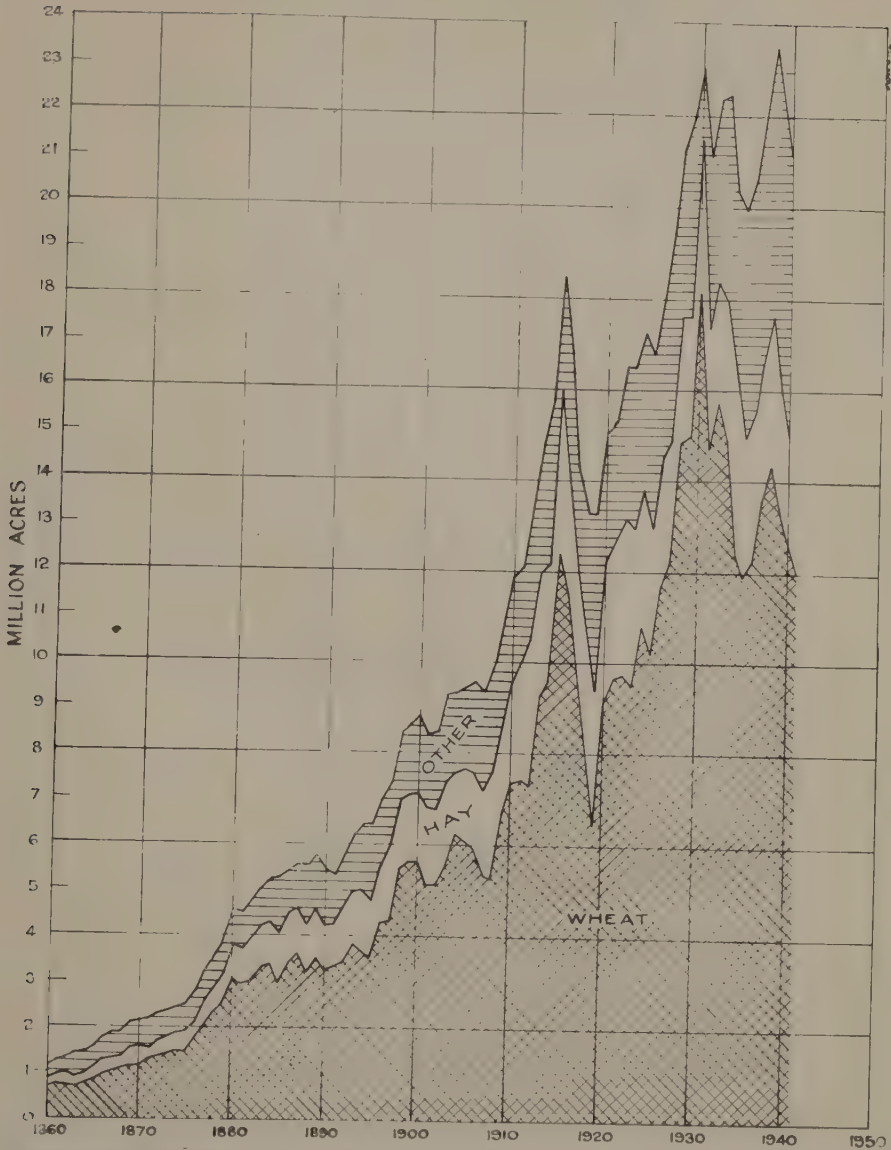
(ii) *Average Yield.* Particulars for each State for the five seasons, and the average for the decennium ended 1942-43, are given hereunder :—

### POTATOES : AVERAGE YIELD PER ACRE.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1938-39 ..	2.34	2.37	1.85	4.31	4.95	3.35	1.95	2.80
1939-40 ..	2.11	2.73	2.27	4.72	5.42	3.76	2.46	3.09
1940-41 ..	2.83	4.90	1.73	5.29	5.15	3.05	3.47	3.74
1941-42 ..	2.18	3.55	1.99	5.05	5.46	3.59	3.27	3.35
1942-43 ..	2.64	3.77	2.27	4.54	5.04	3.37	3.36	3.45
Average for 10 seasons ended								
1942-43 ..	2.46	3.13	1.77	4.48	5.13	3.03	2.61	3.00

Compared with the average yield per acre obtained in other countries, that returned for Australia is very low; the production in New Zealand, for example, in 1942-43 averaged 5.83 tons per acre from an area of 23,860 acres, as compared with 3.45 tons per acre from 140,209 acres in Australia.

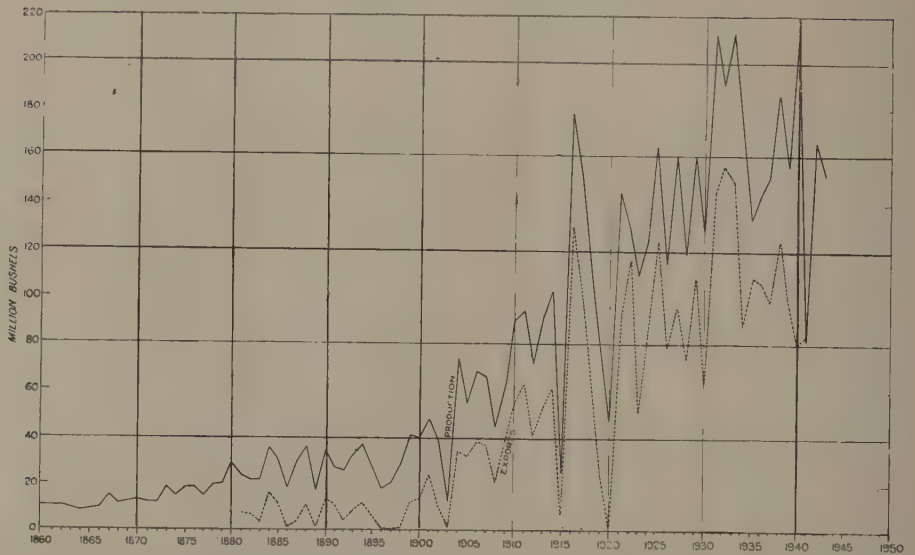
AREA OF CROPS--AUSTRALIA, 1860-61 TO 1940-41.



EXPLANATION.--The total area of crops is shown by the top curve in this graph, and the area of wheat by the bottom curve. The vertical distances between these curves and that in the centre indicate the areas of hay and other crops.



PRODUCTION AND EXPORTS OF WHEAT—AUSTRALIA, TO 1940-41.



NOTE.—The export figures for the years 1915-16 to 1920-21 do not represent the surplus available for export in each of these years because of the dislocation of shipping due to the War of 1914-1919. For these years the quantity consumed in Australia has been averaged and the balance taken as exports.

(iii) *Relation to Population.* The average annual production of potatoes for the last five seasons was 53 tons per 1,000 of population. In Tasmania, where this crop is of far greater importance in relation to population than is the case in any other State, the production per head in 1906-7 was nearly a ton, while for the last five seasons it has averaged almost 9½ cwt. Details for each State for the five seasons ended 1942-43 are as follows :—

**POTATOES : PRODUCTION PER 1,000 OF POPULATION.**

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1938-39 ..	14	43	19	31	57	377	9	40
1939-40 ..	15	47	28	36	66	479	10	46
1940-41 ..	18	113	21	43	67	475	14	65
1941-42 ..	14	61	16	40	54	459	8	47
1942-43 ..	23	99	22	54	69	565	18	67

(iv) *Consumption.* The consumption in Australia during the last five years averaged about 51 tons per 1,000 of population. These figures include the quantities used for seed. Omitting seed potatoes the consumption per 1,000 of population would be 46 tons or 115 lb. per head. From the figures shown above, therefore, it is apparent that New South Wales, Queensland and South Australia do not produce the quantities necessary for their requirements and must import from Tasmania and Victoria which have a surplus.

2. *Imports and Exports.*—Under normal conditions small quantities of potatoes are exported, principally to the Pacific Islands and Papua. In case of a shortage in Australia, supplies are usually obtained from New Zealand. Details showing the trade for the last five years are given in the following table :—

**POTATOES : IMPORTS AND EXPORTS, AUSTRALIA.**

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.(a)	Quantity.	Value.(a)	Quantity.	Value.(a)
	Tons.	£	Tons.	£	Tons.	£
1938-39 .. ..	2	35	1,255	17,443	1,253	17,408
1939-40 .. ..	1	26	1,971	21,995	1,970	21,969
1940-41 .. ..	5,619	36,301	3,321	36,710	-2,298	409
1941-42 .. ..	21	223	12,003	114,644	11,982	114,421
1942-43 .. ..	..	..	1,705	27,064	1,705	27,064

(a) Australian currency values.

Minus sign (—) signifies net imports.

3. *Value of Potato Crop.*—The estimated value of the potato crop of each State for the season 1941-42 and 1942-43 is given in the following table :—

**POTATOES : VALUE OF CROP, 1941-42 AND 1942-43.**

Value.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
	£	£	£	£	£	£	£	£
Total .. ..	310,520	1,773,849	183,416	326,856	244,440	1,471,990	788	4,311,859
Per acre .. ..	£17/11/2	£53/2/9	£22/10/5	£68/6/9	£52/8/8	£48/0/10	£26/5/4	£43/8/3
Total .. ..	811,800	2,162,955	387,056	427,258	361,424	1,807,350	2,697	5,960,540
Per Acre .. ..	£33/3/0	£41/15/10	£39/3/1	£59/1/5	£56/9/8	£44/15/1	£42/2/8	£42/10/3

## § 11. Other Root and Tuber Crops.

1. *General.*—Root crops, other than potatoes, are not extensively grown in Australia, the total area of such crops for the season 1942-43 being only 57,375 acres. The most important were onions, mangolds, sugar-beet, turnips and sweet potatoes. Of these, onions and sugar-beet are most largely grown in Victoria, turnips in Tasmania, and mangolds and sweet potatoes in Queensland. The total area of onions in Australia

during the season 1942-43 was 9,716 acres, giving a yield of 54,688 tons, and averaging 5.63 tons per acre. The area in 1942-43 of root crops other than potatoes and onions was 47,650 acres, from which a production of 185,482 tons was obtained, an average of 3.80 tons per acre. The areas and yields here given exclude the production of "market gardens", reference to which is made in § 17 par. 2.

2. Imports and Exports.—Onions is the only root crop, other than potatoes, in which any considerable overseas trade is carried on by Australia. During the last five years 14,165 tons, valued at £A178,415, were imported, principally from the United States of America, New Zealand, Egypt and Japan, while during the same period the exports, which amounted to 7,079 tons, valued at £A81,336, were shipped mainly to the Pacific Islands, Malaya (British), Canada and New Zealand.

## § 12. Hay.

1. General.—(i) *Area and Production.* As already stated, the chief crop in Australia is wheat grown for grain. Next in importance is hay, which for the season 1942-43 averaged 13.54 per cent. of the total area cropped. In most European countries the hay consists almost entirely of meadow and other grasses, but in Australia a very large proportion consists of oats, wheat and lucerne. The area of hay of all kinds in the several States during the last five years is given below.

### HAY : AREA AND PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Aust.
AREA.								
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1938-39 ..	1,068,925	1,104,558	65,732	519,309	408,276	79,959	3,501	3,250,260
1939-40 ..	706,599	1,204,810	50,970	531,014	395,639	96,264	3,746	2,998,642
1940-41 ..	715,625	672,955	63,581	403,678	418,486	76,082	3,099	2,353,506
1941-42 ..	714,142	1,007,979	58,190	557,624	325,266	92,636	2,291	2,758,128
1942-43 ..	736,157	788,792	70,025	425,505	253,150	82,062	3,424	2,359,115
Average 10 seasons ended								
1942-43 ..	758,970	1,063,792	70,461	517,330	409,872	83,783	2,724	2,906,932
PRODUCTION.								
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1938-39 ..	1,181,264	892,975	109,761	585,554	437,809	109,533	4,265	3,321,161
1939-40 ..	995,678	1,820,878	102,750	646,075	475,677	141,404	5,602	4,158,064
1940-41 ..	617,264	580,237	111,746	394,274	375,143	95,180	3,626	2,177,470
1941-42 ..	715,005	1,443,505	103,220	748,313	414,115	147,628	3,102	3,574,888
1942-43 ..	985,743	1,050,107	118,195	568,529	277,957	109,956	5,568	3,116,055
Average 10 seasons ended								
1942-43 ..	927,035	1,250,170	113,877	582,870	432,406	120,994	3,662	3,431,014

Owing to various causes, the principal being the variation in the relative prices of grain and hay and the favourableness or otherwise of the season for a grain crop, the area of hay is liable to fluctuate considerably. The area of hay in Australia during the season 1915-16, 3,597,771 acres, was the largest on record, whilst the average during the decennium ended 1942-43 amounted to 2,906,932 acres.

(ii) *Average Production.* During the last ten years Queensland and Tasmania show the highest average production per acre, although the area sown in these States is small. For the same period the lowest yield for Australia as a whole was that



of 18.6 cwt. per acre in 1940-41, while the highest was that of 27.8 cwt. in 1939-40. The average for the decennium was 23.4 cwt. Particulars for the several States for the seasons 1938-39 to 1942-43 and the average of the ten years ended 1942-43 are given hereunder :—

## HAY : PRODUCTION PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1938-39 .. ..	1.11	0.72	1.67	1.13	1.07	1.37	1.22	1.02
1939-40 .. ..	1.37	1.51	1.71	1.22	1.20	1.47	1.50	1.39
1940-41 .. ..	0.86	0.86	1.76	0.98	0.90	1.25	1.17	0.93
1941-42 .. ..	1.00	1.43	1.77	1.34	1.27	1.59	1.35	1.30
1942-43 .. ..	1.34	1.33	1.69	1.34	1.10	1.34	1.63	1.32
Average for 10 seasons ended 1942-43 ..	1.22	1.18	1.62	1.13	1.05	1.44	1.34	1.17

(iii) *Varieties Grown.* Information in regard to the crops cut for hay is available for all States, and details for the last five seasons are given in the following table :—

## HAY : VARIOUS KINDS GROWN.

Varieties.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	Acres.	Acres.	Acres.	Acres.	Acres.
<b>NEW SOUTH WALES—</b>					
Wheaten .. ..	559,437	264,239	354,833	346,261	287,470
Oaten .. ..	413,002	349,266	248,493	289,943	351,985
Barley .. ..	2,225	1,921	1,251	1,513	4,800
Lucerne .. ..	92,598	89,958	109,164	75,855	91,671
Other.. ..	1,663	1,215	1,884	570	231
Total .. ..	1,068,925	706,599	715,625	714,142	736,157
<b>VICTORIA—</b>					
Wheaten .. ..	258,839	95,610	96,852	132,773	67,759
Oaten .. ..	722,528	804,246	464,192	691,486	518,040
Lucerne, etc. ..	123,191	304,954	111,911	183,720	202,993
Total .. ..	1,104,558	1,204,810	672,955	1,007,979	788,792
<b>QUEENSLAND—</b>					
Wheaten .. ..	6,628	7,259	6,502	8,350	10,678
Oaten .. ..	4,901	3,179	2,475	5,710	6,085
Lucerne .. ..	50,228	46,385	49,435	37,010	51,715
Other.. ..	3,975	3,147	5,109	7,120	1,547
Total .. ..	65,732	59,970	63,581	58,190	70,025
<b>SOUTH AUSTRALIA—</b>					
Wheaten .. ..	227,604	197,728	212,284	229,792	152,589
Oaten .. ..	270,425	303,436	171,491	303,558	230,901
Lucerne .. ..	4,805	6,433	2,209	4,251	4,424
Other.. ..	16,475	24,017	17,694	20,023	37,591
Total .. ..	519,309	531,614	403,678	557,624	425,505
<b>WESTERN AUSTRALIA—</b>					
Wheaten .. ..	165,153	135,094	228,736	121,951	100,947
Oaten .. ..	204,610	213,248	149,899	166,772	118,000
Lucerne .. ..	..	..	..	..	..
Other.. ..	38,513	47,297	39,764	36,477	33,904
Total .. ..	408,276	395,639	418,486	325,266	253,150
<b>TASMANIA—</b>					
Wheaten .. ..	979	491	772	133	1,962
Oaten .. ..	64,310	70,097	64,098	73,771	61,542
Barley .. ..	533	310	235	133	492
Other.. ..	14,137	25,366	10,977	18,599	18,066
Total .. ..	79,959	96,264	76,082	92,636	82,062

Oats is generally the predominant hay crop throughout Australia except in Queensland where lucerne is the chief variety grown. For all States the proportions of the areas sown to the principal kinds of hay were 55 per cent. for oaten, 26 per cent. for wheaten, 15 per cent. for lucerne, and 4 per cent. for other hay.

2. **Comparison with Other Countries.**—As already stated, the hay crops of most European countries consist of grasses of various kinds, amongst which clover, lucerne, sainfoin and rye grass occupy prominent places. The statistics of hay production in these countries are not prepared on a uniform basis, consequently any attempt to furnish extensive comparisons would be misleading. It may be noted, however, that in Great Britain the production of hay from clover, sainfoin, etc., for the year 1938 amounted to 1,893,000 tons from 1,571,000 acres, while from permanent grasses a yield of 3,389,000 tons of hay was obtained from 4,402,000 acres, giving a total of 5,282,000 tons from 5,973,000 acres, or an average of about 18 cwt. per acre. Details later than 1938 are not available.

3. **Imports and Exports.**—Under normal conditions, hay, whether whole or in the form of chaff, is somewhat bulky for oversea trade, and consequently does not figure largely amongst the imports and exports of Australia. During 1942-43, 28 tons were imported, while the exports amounted to 5,207 tons, valued at £34,998.

4. **Value of Hay Crop.**—The following table shows the value, and the value per acre, of the hay crop of the several States for the seasons 1941-42 and 1942-43 :—

HAY : VALUE OF CROP, 1941-42 AND 1942-43.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
	£	£	£	£	£	£	£	£
1941-42.								
Total Value	4,435,010	4,774,072	874,986	1,886,255	693,704	304,330	20,077	12,988,434
Value per acre	£6/4/2	£4/14/9	£15/0/9	£3/7/8	£2/2/8	£3/7/3	£8/15/3	£4/14/2
1942-43.								
Total Value	6,480,490	4,431,036	1,098,003	1,309,877	703,132	384,850	37,684	14,445,072
Value per acre	£8/16/1	£5/12/4	£15/13/7	£3/1/7	£2/15/7	£4/13/10	£11/0/1	£6/2/6

### § 13. Green Fodder.

1. **Nature and Extent.**—A considerable area is devoted to the production of green fodder, mainly in connexion with the dairying industry. Under normal conditions the principal crops cut for green fodder are maize, sorghum, rape and lucerne, while small quantities of sugar-cane also are so used. In certain circumstances the area sown to green fodder may be supplemented by areas of cereals sown originally for grain. In an adverse season some cereal crops may show no promise of producing grain or even hay and consequently the area may be turned over to stock for grazing. Particulars concerning the area of green fodder in the several States during each of the last five years are given in the following table :—

GREEN FODDER : AREA.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1938-39	573,569	108,796	448,643	275,988	352,442	28,681	681	1,788,800
1939-40	519,581	91,441	550,716	284,317	380,793	26,130	974	1,853,952
1940-41	579,046	130,738	593,521	213,140	430,262	35,045	603	1,988,955
1941-42	578,028	97,158	583,770	182,127	338,485	27,780	968	1,808,316
1942-43	728,404	103,598	578,452	285,587	351,509	62,751	1,518	2,111,819

2. **Value of Green Fodder Crops.**—The value of these crops is variously estimated in the several States, and the Australian total for the season 1942-43 excluding Western Australia may be taken approximately as £4,205,000.

### § 14. Sugar-cane and Sugar-beet.

1. **Sugar-cane.**—(i) *Area.* Sugar-cane for sugar-making purposes is grown only in Queensland and New South Wales, and much more extensively in the former than in the latter State. Thus, of a total area of 329,051 acres of sugar-cane grown for this purpose in Australia for the season 1942-43, there were 310,122 acres, or about 94 per cent., in Queensland. This latter area is made up of 231,256 acres cut for crushing, 11,619 acres cut for plants, and 67,247 acres left to stand-over or young cane on areas not ready for cutting. Sugar-cane growing appears to have been started in Australia in or about 1862, as the earliest statistical record of sugar-cane as a crop is that which credits Queensland with an area of 20 acres for the season 1862-63. In the following season the New South Wales returns show an area of 2 acres of this crop. The area of cane in New South Wales reached its maximum in 1895-96 with a total of 32,927 acres. Thenceforward, with slight variations, it fell gradually to 10,490 acres in 1918-19, but from that year it expanded until 1924-25, when about 20,000 acres were planted. Since 1924-25, the area has fluctuated between 15,000 acres and 21,000 acres, the average for the decennium ended 1942-43 amounting to 19,867 acres. In Queensland, although fluctuations in area are manifest, the general trend has been upwards, but, because of the contingencies arising from war, the area under sugar in Queensland has declined since 1940-41. In 1939-40 the acreage of cane was the highest on record, namely, 353,996 acres. The area of sugar-cane in Australia from 1938-39 and the average for the decennium ended 1942-43 are given in the following table:—

SUGAR-CANE : AREA, ACRES.

Season.	New South Wales.			Queensland.			Australia.			Total.
	Area crushed.	Area of stand-over and newly-planted cane.	Area cut for plants.	Area crushed.	Area of stand-over and newly-planted cane.	Area cut for plants.	Area crushed.	Area of stand-over and newly-planted cane.	Area cut for plants.	
1938-39 ..	10,458	10,772	163	251,847	84,098	11,254	262,305	94,870	11,417	368,592
1939-40 ..	10,488	10,229	254	262,181	80,934	10,881	272,669	91,163	11,135	374,967
1940-41 ..	10,192	10,386	184	263,299	75,082	12,480	273,491	85,468	12,664	371,623
1941-42 ..	8,491	9,896	330	246,073	77,062	10,326	254,564	86,958	10,656	352,178
1942-43 ..	9,732	8,958	239	231,256	67,247	11,619	240,988	76,205	11,858	329,051
Average 10 seasons ended										
1942-43 ..	9,831	9,823	213	242,080	78,613	10,677	251,911	88,436	10,890	351,237

(ii) *Productive and Unproductive Cane.* The areas given in the preceding table do not include the small acreage cut for green fodder which in 1942-43 amounted to 8,906 acres in Queensland. The whole area was not necessarily cut for crushing during any one season, there being always a considerable amount of young and "stand-over" cane, as well as a small quantity required for plants. Thus the season in which the highest acreage is recorded may not show the greatest area of productive area cut for crushing.

(iii) *Production of Cane and Sugar.* For Queensland, statistics of the production of sugar-cane are not available prior to the season 1897-98. In that season the total for Australia was 1,073,883 tons, as against the maximum production of 6,313,369 tons in 1939-40, subsequently declining to 4,691,501 tons in 1942-43. The average



production of cane during the decennium ended 1942-43 was 5,219,895 tons, and the quantity of raw sugar amounted to 749,747 tons. Particulars of the total production of cane and sugar for the last five years and the decennium ended 1942-43 are as follows :—

### SUGAR-CANE : PRODUCTION OF CANE AND SUGAR.

Season.	New South Wales.		Queensland.		Australia.	
	Cane.	Sugar.	Cane.	Sugar.	Cane.	Sugar.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1938-39 .. ..	336,701	45,022	5,342,193	778,064	5,678,894	823,086
1939-40 .. ..	274,548	39,883	5,035,821	801,738	5,310,369	842,621
1940-41 .. ..	342,548	47,041	5,189,808	789,416	5,532,356	836,457
1941-42 .. ..	359,433	48,330	4,794,437	697,034	5,153,870	745,880
1942-43 .. ..	338,013	44,290	4,353,488	605,609	4,691,501	649,899
Average 10 seasons ended 1942-43 ..	302,045	40,028	4,917,200	700,710	5,219,895	749,747

The production of raw sugar in Australia in 1942-43 amounted to 649,899 tons manufactured from 4,691,501 tons of cane, the maximum production being 823,021 tons recorded in 1939-40. Official data are not available regarding the total number engaged in the sugar industry in Queensland, other than the number of separate holdings growing cane which in 1942-43 totalled 6,945, and employees in sugar mills which in 1942-43 numbered 4,426. In the report of the Sugar Inquiry Committee, 1931, however, it was stated that the number of persons employed in all branches of the industry was 28,737. In addition, there is the employment afforded in New South Wales, particulars of which are not available, but the number is probably in the vicinity of 2,000.

(iv) *Average Production of Cane Sugar.* Owing to climatic variation, comparison between the average yields of cane per productive acre in Queensland and New South Wales cannot be accurately made except on an annual basis. In New South Wales the crop matures in from 20 to 24 months, whereas in Queensland a period of from 12 to 14 months is sufficient. Allowing for the disparity in maturing periods the average annual yields of cane per productive acre during the decennium ended 1942-43 were 16.80 tons for New South Wales, and 18.71 tons for Queensland. Similarly, the yields of sugar per acre crushed for the same period were estimated at 2.44 tons and 2.69 tons respectively. Apart from the consideration mentioned above, the yields of cane and sugar per acre crushed for Australia for the ten years ended 1942-43 were 20.72 tons and 2.98 tons respectively, as compared with 17.89 tons and 2.38 tons for the decennium ended 1932-33.

### SUGAR-CANE AND SUGAR : YIELD PER ACRE.

Season.	New South Wales.			Queensland.			Australia.		
	Cane per acre Crushed.	Sugar per acre Crushed.	Cane to each ton of Sugar.	Cane per acre Crushed.	Sugar per acre Crushed.	Cane to each ton of Sugar.	Cane per acre Crushed.	Sugar per acre Crushed.	Cane to each ton of Sugar.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1938-39 .. ..	32.20	4.31	7.48	21.21	3.09	6.87	21.65	3.14	6.90
1939-40 .. ..	26.18	3.52	7.44	23.03	3.40	6.77	23.15	3.41	6.80
1940-41 .. ..	33.61	4.62	7.28	19.68	2.88	6.82	20.20	2.95	6.85
1941-42 .. ..	42.33	5.69	7.43	19.48	2.84	6.87	20.25	2.93	6.91
1942-43 .. ..	34.73	4.55	7.63	18.83	2.62	7.19	19.47	2.70	7.22
Average 10 seasons ended 1942-43 ..	30.79	4.07	7.50	20.31	2.93	6.93	20.72	2.98	6.90

(v) *Quality of Cane.* The quantity of cane required to produce a ton of sugar varies with the variety planted, the district and the season. For the decennium ended 1942-43 it took 6.90 tons of cane to produce 1 ton of sugar or 14.33 per cent. of its total weight. As the result of the systematic study of cane culture in Queensland and improvements in field and mill methods the sugar content of the cane has been considerably increased, and in 1937-38 only 6.78 tons of cane were required to produce one ton of sugar. It is believed that this is the highest sugar content obtained anywhere in the world. During the ten years ended 1932-33 it required on the average 7.52 tons of cane to produce one ton of sugar in Australia, whereas the average figure for the decennium ended 1942-43 was reduced to 6.96 tons.

The Bureau of Sugar Experiment Stations in Queensland is rendering useful service to the sugar industry by advocating and demonstrating better methods of cultivation, the more scientific use of fertilizers, lime, etc., and by producing and distributing improved varieties of cane.

(vi) *Relation to Population.* The yield of raw sugar in Australia during the last five years was more than sufficient to supply local requirements, the average production during the period amounting to 251 lb. per head of population. Details for the period 1938-39 to 1942-43 are as follows:—

#### RAW SUGAR : PRODUCTION PER HEAD OF POPULATION.

State:	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	lb.	lb.	lb.	lb.	lb.
New South Wales .. ..	37	30	38	38	35
Queensland .. ..	1,731	1,062	1,651	1,710	1,306
Australia .. ..	200	207	230	234	202

(vii) *Consumption.* The average annual consumption of raw sugar during the five years ended 1942-43 was estimated at 451,714 tons, equal to 143.21 lb. of raw sugar or 136.76 lb. of refined sugar per head of population. The sugar content of jam, preserved fruit, milk, &c., exported during the period has been deducted in arriving at the figures quoted. The quantity of sugar used during the five years in factories is shown in the following table, the figures including, where necessary, estimates of consumption based on the sugar content of the finished product. Particulars of sugar used in establishments not classified as factories are not available, and consequently the quantities shown below are deficient to that extent.

#### SUGAR : CONSUMPTION IN FACTORIES, AUSTRALIA.

Factories.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	Tons.	Tons.	Tons.	Tons.	Tons.
Aerated Waters and Cordials	11,810	12,346	13,306	17,982	21,167
Bacon Factories .. ..	207	205	322	335	350
Biscuits and Bakeries— including Cakes and Pastry	18,801	18,728	20,515	22,657	24,881
Breweries .. ..	16,733	17,742	19,669	21,300	19,612
Cereal Foods .. ..	1,287	1,317	1,329	1,484	1,267
Condensed and Concentrated Milk .. ..	6,889	7,918	9,943	2,374	1,728
Confectionery, Ice Cream, &c.	26,926	29,710	30,193	28,806	33,023
Jams, Jellies and Preserved Fruit(a) .. ..	40,537	52,391	59,020	61,058	69,944
Other .. ..	583	459	1,785	(b) 33,779	(c) 12,562
Total .. ..	123,833	140,876	156,082	189,775	184,540

(a) Including Condiments, Pickles, etc.  
(c) Mainly butter factories.

(b) Mainly butter factories and distilleries.

(viii) *Control of Cane—Production in Queensland.* By agreement between the Commonwealth and Queensland Governments an Australian price has been fixed for refined sugar of £33 4s. per ton in each of the capital cities. This is substantially above the world price which has prevailed during recent years, and the proceeds of Australian sales are pooled with the proceeds of exports. This pooling is made possible by the acquisition by the Queensland Government of all sugar produced in the State, under legislation which has been in force since 1915. The small New South Wales production (about 5 per cent. of the whole) is also acquired by the Queensland Sugar Board by private agreement.

Sugar production, which in 1923 had scarcely been sufficient to cover Australian requirements, grew very rapidly in subsequent years. In 1925 the Queensland Government took steps to prevent, as a general rule, new land from being opened up for cane production. At this date 56 per cent. of the sugar production was consumed in Australia and 44 per cent. exported. After 1925, production remained stable for some years. In 1929 the operations of the pool, which had hitherto received at a uniform price all sugar offered it by the mills, were re-organized. After 1929 mills only received the full pool price for sugar up to the amount of their previous maximum production. Any further supplies were acquired at export price only.

Between 1929 and 1939 the export price was generally less than half the pool price. In spite of this, production increased by 72 per cent. between 1929 and 1939. In 1939, in view of the fact that the volume of Australian exports is now restricted by the International Sugar Agreement, the Queensland Parliament passed further legislation limiting the pool to 737,000 tons. Any production in excess of this was to be acquired at a penalty price of 10s. per ton. This tonnage was divided up in quotas between the mills, on the understanding that the mills would allocate quotas of production to individual farmers. Proclamations issued by the Government permitted the harvesting of the whole crops for 1939 and 1940; but the basic quotas totalling 737,000 tons will be strictly adhered to for subsequent seasons.

2. *Sugar-beet.*—(i) *Area and Production.* Victoria is the only State growing beet for sugar, although 5 tons of sugar-beet were produced from 1 acre in Tasmania during 1942-43. Particulars in regard to acreage and production for Victoria for the last four years and for the decennium ended 1942-43 are shown in the following table:—

SUGAR-BEET : AREA AND PRODUCTION, VICTORIA.

Particulars.		1939-40.	1940-41.	1941-42.	1942-43.	Average ten seasons ended 1942-43.
Area harvested ..	acres	4,235	3,588	2,866	955	3,289
Production ..	tons	42,903	27,031	24,546	5,997	32,265
Average per acre ..	„	10.13	7.53	8.56	6.28	9.81
Sugar produced ..	„	6,250	3,279	2,769	678	3,970

The area under sugar beet has declined steadily during the war years. In 1942-43 the area harvested was less than one quarter of the area harvested in 1939-40. Much of this decline is due to the diversion of many areas to the production of vegetables as a war-time measure.

(ii) *Encouragement of Beet-growing.* The irrigation scheme on the Macallister River has provided an assured water supply for the district and has enabled the industry to expand. A fine grade of white sugar is manufactured at Maffra, and considerable quantities of beet pulp and molasses are distributed for stock feed.



3. **Sugar Bounties.**—Reference is made to the various Acts in connexion with sugar bounties and sugar excise tariffs in early issues of the Official Year Book. (See No. 6, pp. 394–6.)

4. **Sugar Purchase by Commonwealth Government.**—The steps taken by the Commonwealth Government in connexion with this matter are also referred to in the Official Year Book. (See No. 18, p. 720.)

5. **Sugar Agreement in Australia.**—**Embargo on Imports, etc.**—By agreement between the Commonwealth and Queensland Governments in 1925, the embargo on the importation of foreign sugar, which was first introduced in September, 1915, was extended for three years from 1st September, 1925. The price of raw sugar needed for home consumption was fixed at £27 per ton, £1 of which was to defray administrative and general expenses of the Sugar Board and to provide special concessions to certain consumers of sugar. The embargo was later extended for a further period of three years until 1st August, 1931, on practically the same terms as previously.

In response to representations, the Commonwealth Government appointed a Committee of Inquiry on the 23rd August, 1930, to report on the industry. The Committee consisted of eight members, representing the various interests concerned. The reports of the Committee were made available in March, 1931, and the renewal of the sugar agreement with certain modifications was recommended. The terms of the new agreement closely followed those previously in force, particularly as regards the embargo on imports and the fixation of prices. The assistance to the fruit industry was increased from an average of £180,000 per annum to £315,000 by way of grant from the sugar industry. The agreement was signed on 1st June, 1931, and was to remain in force for a period of five years from 1st September, 1931. In 1932, however, conferences arranged between the Commonwealth Government and representatives of the industry agreed to a reduction of  $\frac{1}{2}$ d. per lb. in the retail price of sugar from 1st January, 1933, until the end of the period of the agreement (31st August, 1936). It was also decided to reduce the amount of the assistance to the fruit industry to £200,000. A renewal of the agreement for a period of five years commencing 1st September, 1936, was negotiated between the Commonwealth and Queensland Governments in July, 1935, and in May, 1940, the agreement was extended for a further period of five years to 31st August, 1946. The wholesale and retail price of sugar remains unaltered but the concession to the fruit industry was increased to £216,000 in 1936.

6. **International Sugar Agreement.**—Delegates of 21 Nations representing 90 per cent. of producers met in London and entered into an agreement on 6th May, 1937, providing for the regulation of the production and marketing of sugar in the world during a period of five years from 1st September, 1937. The object of the agreement is to assure an adequate supply of sugar at a price not exceeding the cost of production, including a reasonable profit, to efficient producers. For this purpose, each country was given a basic annual export quota, which will be increased in proportion to any expansion in sugar consumption. By this means, and by limitations on stocks and measures to encourage more consumption it is expected that the International Sugar Council, which has been established to administer the agreement, will be able to hold in proper balance the supplies and requirements of sugar. The export quota originally allotted to Australia was 400,000 long tons. This figure may be increased, however, where the delivery from any British Colony falls short of its quota. In such circumstances, the deficiency may be allocated among other producing countries of the Empire including Australia.

This agreement, which would normally expire on 31st August, 1942, has proved of great benefit to Australia. In 1943, fourteen of the original 21 Nations signed a protocol continuing the agreement for another two years ending 31st August, 1944. Since the outbreak of war in September, 1939, however, the agreement has virtually lapsed because of the difficulties arising therefrom.

7. Net Return for Sugar Crop.—Calculations by the Sugar Board regarding the disposal of the crop, net value of exports and the average price realized during each of the last five years will be found in the following table :—

### SUGAR : NET RETURNS, AUSTRALIA.

Year.	Percentage Exported. (a)	Net Value of Exports per Ton. (a)	Average Price per Ton for Whole Crop. (a)	Estimated Value of Crop.
	Per cent.	£ s. d.	£ s. d.	£
1938-39 .. ..	55.78	8 4 3	15 3 11	12,806,376
1939-40 .. ..	58.68	10 7 6	15 17 7	15,329,011
1940-41 .. ..	50.43	11 5 6	17 2 11	14,093,668
1941-42 .. ..	26.25	10 18 9	17 18 11	13,770,584
1942-43 .. ..	9.28	10 16 3	18 18 5	11,762,432

(a) As supplied by the Queensland Sugar Board.

The estimated value of the raw sugar produced has been taken from the audited accounts of the Queensland Sugar Board. The values stated represent the gross receipts from sales in Australia and overseas less refining costs, freight, administrative charges, etc., and export charges, but not deducting concessions to the fruit industry and other rebates which in 1942-43 amounted to £216,581. The value thus obtained represents the net market value of all raw sugar sold, and since 1933 is divided between the growers and millers in the approximate proportions of 70 per cent. and 30 per cent. respectively. Prior to that year the distribution was about two-thirds to the grower and one-third to the miller.

8. Imports and Exports of Sugar.—Owing to the embargo and the increased production of sugar in Australia excepting for the years 1939-40 and 1941-42, imports have practically ceased. Particulars showing the imports and exports of cane sugar for the last five years are as follows :—

### SUGAR : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Tons.	£A.	Tons.	£A.	Tons.	£A.
1938-39.. ..	42	883	443,021	4,177,741	442,979	4,176,858
1939-40.. ..	230	6,151	524,432	6,185,992	524,202	6,179,841
1940-41.. ..	14	362	374,707	4,880,402	374,693	4,880,040
1941-42.. ..	1,922	46,250	198,789	2,636,430	196,867	2,590,180
1942-43.. ..	..	5	66,332	1,001,353	66,332	1,001,348

9. Sugar By-products.—Large quantities of molasses are produced as a by-product in the sugar mills. Details for a series of years of the quantities produced and the proportions used for distilling, fuel, manure and other purposes will be found in Chapter XIX. "Manufacturing Industry". A distillation plant erected at Sarina, near Mackay, was opened during 1927 and produces power alcohol of excellent quality. Other distilleries have been erected since the outbreak of war in 1939.

Boards are now being made from the residuum of crushed fibre after the removal of the sugar content from sugar-cane. These boards are used in the building industry for walls and ceilings and possess high insulating and sound-absorbing properties.

10. Sugar Prices.—The prices of sugar in Australia from 1915 to 1946 are shown in the following table. During recent years the prices were fixed in accordance with the agreements referred to on page 813.

### SUGAR : PRICES FOR CONSUMPTION IN AUSTRALIA.

Date of Determination.	Raw Sugar.		Refined Sugar.	
	Price to Grower and Miller per Ton.		Wholesale Price per Ton.	Retail Price per lb.
	£	s. d.	£	s. d.
19.7.15 to 15.1.16 .. .. .	18	0 0	25	10 0
16.1.16 to 30.6.17 .. .. .	18	0 0	29	5 0
1.7.17 to 24.3.20 .. .. .	21	0 0	29	5 0
25.3.20 to 30.6.20 .. .. .	21	0 0	49	0 0
1.7.20 to 31.10.22 .. .. .	30	6 8	49	0 0
1.1.22 to 30.6.23 .. .. .	30	0 8	42	0 0
1.7.23 to 21.10.23 .. .. .	27	0 0	42	0 0
22.10.23 to 31.8.25 .. .. .	26	0 0	37	11 4
1.9.25 to 31.8.31 .. .. .	(a) 26	10 0	37	6 8
1.9.31 to 4.1.33 .. .. .	26	0 0	37	6 8
5.1.33 to 31.8.36 .. .. .	24	0 0	33	4 0
1.9.36 to 31.8.41 .. .. .	24	0 0	33	4 0
1.9.41 to 31.8.46 .. .. .	24	0 0	33	4 0

(a) The price of raw sugar for the years 1925 to 1943 was estimated at from £24 to £26 10s. per ton, but as the result of the values received for the surplus exported, the actual price obtained in 1925-26 was £19 10s. 7d.; 1926-27, £24 10s. 10d.; 1927-28, £22 0s. 4d.; 1928-29, £20 17s. 11d.; 1929-30, £20 8s. 2d.; 1930-31, £19 12s. 11d.; 1931-32, £18 2s. 11d.; 1932-33, £18 17s. 9d.; 1933-34, £16 6s. 3d.; 1934-35, £15 13s. 9d.; 1935-36, £16 5s. 11d.; 1936-37, £15 7s. 4d.; 1937-38, £15 7s. 4d.; 1938-39, £15 3s. 11d.; 1939-40, £15 17s. 7d.; 1940-41, £17 2s. 11d.; 1941-42, £17 18s. 11d. and 1942-43, £18 18s. 5d.

11. War-time Arrangements.—After the outbreak of war in September, 1939, the British Ministry of Food concluded arrangements with the Queensland Government for the purchase of Australia's surplus production of raw sugar for the season 1939. The price was fixed at £Stg.7 10s. per ton at United Kingdom ports plus the existing tariff preference on dominion sugar of £Stg.3 15s. per ton.

Similar agreements were negotiated for the disposal of the surplus from the 1940 and 1941 crops. The price for both crops, however, was increased to £Stg.8 17s. 6d. per ton plus the existing preference.

The existing arrangement was continued for the disposal of the 1943 crop, but the price was increased to £Stg.10 plus the existing preference. Shipments of sugar would be made to Empire and Allied consuming countries in accordance with the requirements of the Ministry of Food.

## § 15. Vineyards.

1. Progress of Cultivation.—(i) *Area of Vineyards.* The date of introduction of the vine into Australia has been variously set down by different investigators, the years 1815 and 1828 being principally favoured. It would seem, however, that plants were brought out with the first fleet in 1788, consequently the Australian vine is as old as Australian settlement. As already mentioned, a report by Governor Hunter gives the area of vines in 1797 as 8 acres. From New South Wales the cultivation spread to Victoria and South Australia, and these States have now far outstripped the mother



State in the area of this crop. In Queensland and Western Australia also vine-growing has been carried on for many years, but little progress has been made. The purposes for which grapes are grown in Australia are (a) for wine-making; (b) for table use; and (c) for drying. The total area of vines in the several States during each of the last five years and the average for the decennium ended 1942-43 are given in the following table:—

VINEYARDS : AREA.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	A.C.T.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres
1938-39 ..	16,979	42,436	2,793	58,020	6,277	2	126,507
1939-40 ..	16,983	42,594	2,921	58,222	6,457	2	127,179
1940-41 ..	16,478	43,238	2,903	58,416	8,841	3	129,879
1941-42 ..	16,445	42,554	3,687	58,039	9,011	3	129,739
1942-43 ..	16,302	42,634	3,040	58,202	10,126	3	130,307
Average 10 seasons ended 1942-43	16,223	41,998	2,692	56,490	7,051	..	124,454

The total area of vines in Australia has shown a substantial expansion since 1860. This development has been interrupted periodically, decreases occurring in 1890, the years between 1904 and 1910, and in 1914. Since the latter year the area increased without interruption from about 61,000 acres to more than 114,000 acres in 1924-25, due largely to the planting of varieties suitable for drying. Subsequently the area fluctuated around 114,000 acres but commenced to increase again in 1933-34. Since then the expansion has continued, reaching the record area of 130,307 acres in 1942-43.

(ii) *Report on the Wine Industry.* An investigation into conditions in the wine industry was undertaken by the Commonwealth Director of Development and the Senior Inspector of Excise, Department of Trade and Customs, and a comprehensive report was presented to Parliament on the 17th July, 1931.

(iii) *Wine Production, Bounties, etc.* The production of wine has not increased as rapidly as the suitability of soil and climate would appear to warrant, owing chiefly to two causes. In the first place Australians are not a wine-drinking people; it is estimated that they consume approximately  $2\frac{1}{2}$  million gallons only or 0.3 gallons per head per annum and consequently the local market is restricted. Secondly, the comparatively new and unknown wines of Australia must compete in the markets of the old world with the well-known and long-established brands from other countries. Continued efforts are being made to bring the Australian wines under notice both here and abroad and with the assistance of a Commonwealth bounty on the export of fortified wine of specified strength, the industry has been greatly stimulated. Further development however, has been interrupted by the war. The loss of the United Kingdom market due to the lack of shipping space has placed the wine industry in a most difficult position. In addition, wine is not a priority cargo and until shipping conditions improve, the difficult problem will remain. The attention of growers regarding over-production has been directed by the Australian Wine Board.

Particulars of the Wine Export Bounty are shown in § 18 hereafter. The Wine Export Bounty Act 1930 which provided for payment at the rate of 1s. 9d. per gallon was replaced by a new Act in 1934 which fixed the rate at 1s. 3d. per gallon for the two years ending 28th February, 1937, and thereafter at a reduction of 1d. per gallon for each succeeding year until 1940. The payment of a bounty at the rate of 1s. per gallon for a period of five years to 28th February, 1945, was provided for under the Wine Export Bounty Act of 1939-1940.

The quantity of wine produced in the several States during the last five seasons together with the average for the decennium ended 1942-43 are given in the following table :—

## WINE : PRODUCTION.

('000 omitted.)

Season.	N.S.W.	Victoria.	Queensland.	S. Aust.	W. Aust.	Australia.
	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.
1938-39 ..	2,502	825	45	11,147	439	14,958
1939-40 ..	2,090	1,126	43	11,180	336	14,775
1940-41 ..	3,229	1,208	23	11,067	470	15,997
1941-42 ..	3,112	1,162	32	11,140	410	15,856
1942-43 ..	2,721	1,382	44	15,132	514	19,793
Average 10 seasons ended 1942-43 ..	2,521	1,361	32	12,655	427	16,996

2. Imports and Exports of Wine.—(i) *Imports.* The principal countries of origin of wine imported into Australia were, before the War, France, Spain, Portugal and Italy, the bulk of the sparkling wines coming from France. The imports for the last five years are given hereunder :—

## WINE : IMPORTS INTO AUSTRALIA.

Year.	Quantity.			Value.		
	Sparkling.	Other.	Total.	Sparkling.	Other.	Total.
	Gallons.	Gallons.	Gallons.	£A.	£A.	£A.
1938-39 ..	10,759	30,451	41,210	23,303	22,792	46,095
1939-40 ..	6,500	19,847	26,347	18,164	17,428	35,592
1940-41 ..	545	5,791	6,336	1,411	5,445	6,856
1941-42 ..	74	3,112	3,186	212	2,887	3,099
1942-43 ..	3	59	62	63	82	145

(ii) *Exports.* Before the War, practically all wine exported was sent to the United Kingdom, approximately 200,000 gallons being sent elsewhere. Of the quantity exported in 1942-43, the main countries of destination were :—New Caledonia (251,989 gallons, £60,130); New Zealand (169,419 gallons, £00,361); and Canada (168,212 gallons, £81,587).

Wine was not included among the commodities sold by contract to the Government of the United Kingdom as a war-time emergency. Because of the prior claims of other commodities to shipping space, the export of wine to the United Kingdom has virtually ceased.

Exports for the last five years are given in the following table :—

### WINE : EXPORTS FROM AUSTRALIA.

Year.	Quantity.			Value.		
	Sparkling.	Other.	Total.	Sparkling.	Other.	Total.
	Gallons.	Gallons.	Gallons.	£A.	£A.	£A.
1938-39 ..	2,369	3,718,135	3,720,504	3,507	978,570	982,077
1939-40 ..	2,564	3,617,240	3,619,804	3,666	930,580	934,246
1940-41 ..	13,368	1,644,639	1,658,007	20,366	496,047	516,413
1941-42 ..	17,000	1,376,803	1,393,803	26,444	471,420	497,864
1942-43 ..	9,918	807,097	817,015	12,136	284,907	297,043

3. Other Viticultural Products.—(i) *Table Grapes*. Grapes for table use are grown in all the States except Tasmania, but the area cultivated to this variety is only about 7 per cent. of the productive area of grapes. The greatest development in the industry has taken place in the drying of raisins and currants, particularly in Victoria and South Australia. The quantities of table grapes grown during the last five seasons are as follows :—

### TABLE GRAPES : PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Australia.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1938-39 .. ..	4,034	4,089	2,313	985	3,139	14,560
1939-40 .. ..	3,975	4,107	2,118	1,046	2,523	13,769
1940-41 .. ..	4,869	4,256	2,496	1,598	2,528	15,747
1941-42 .. ..	4,573	3,659	3,234	1,131	2,308	14,905
1942-43 .. ..	5,186	4,123	2,621	1,218	3,194	16,342

(ii) *Raisins and Currants*. The quantities of raisins (sultanas and lexias) and currants dried during each of the last six seasons and the decennium ended 1942-43, are given in the following table. The production for the 1943-44 season has been estimated at 102,000 tons which will be the greatest output recorded in any year. The production goal for 1944-45 has been fixed at 97,000 tons.

### RAISINS(a) AND CURRANTS : PRODUCTION.

Season.	N. S. Wales.		Victoria.		South Aust.		Western Aust.		Australia.	
	Raisins.	Currants.	Raisins.	Currants.	Raisins.	Currants.	Raisins.	Currants.	Raisins.	Currants.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1938-39 .. ..	4,837	1,239	33,659	10,301	11,656	9,569	737	2,762	50,889	23,871
1939-40 .. ..	6,613	1,459	47,323	10,642	14,993	10,447	723	2,978	69,657	25,526
1940-41 .. ..	6,777	1,102	41,342	6,629	15,517	6,745	487	2,467	64,123	16,943
1941-42 .. ..	8,020	1,381	47,520	8,738	15,889	8,814	470	2,420	71,899	21,353
1942-43 .. ..	7,528	1,360	46,439	8,620	15,263	9,253	674	2,329	69,904	21,562
1943-44(b) ..	7,850	1,350	48,950	10,100	19,380	10,500	620	3,250	76,800	25,200
Average 10 seasons ended										
1942-43 .. ..	5,679	1,113	40,114	8,219	13,653	8,544	654	2,205	60,100	20,081

(a) Sultanas and Lexias.

(b) Subject to revision.



4. **Exports of Raisins and Currants.**—The following table gives the oversea exports of raisins and currants during each of the last five years. As the quantities of imports were practically negligible they have been omitted.

### RAISINS AND CURRANTS: EXPORTS, AUSTRALIA.

Year.	Raisins.		Currants.		Total Raisins and Currants.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Tons.	£A.	Tons.	£A.	Tons.	£A.
1938-39 ..	49,550	1,974,045	23,759	772,966	73,309	2,747,011
1939-40 ..	37,285	1,447,353	13,711	487,678	50,996	1,935,031
1940-41 ..	47,793	1,790,990	16,124	574,648	63,917	2,365,638
1941-42 ..	49,341	1,958,522	14,706	462,665	64,047	2,421,187
1942-43 ..	46,731	1,813,713	11,240	358,039	57,971	2,171,752

Since 1912 Australia has not only produced sufficient raisins and currants for home consumption, but has been able to maintain a large export trade. The average annual production for the decennium ended 1942-43 was 80,000 tons, of which 59,000 tons were exported and about 21,000 tons were available for local requirements. The chief countries importing Australian raisins and currants are the United Kingdom, Canada and New Zealand, the quantities exported thereto in 1942-43 being 36,637, 13,478 and 7,078 tons or 63, 23 and 12 per cent. respectively. Exports to Canada increased from 4,000 tons in 1928-29 to 16,944 tons in 1939-40, decreasing to 13,478 tons in 1942-43.

5. **War-time Contract.** Since the outbreak of War the Government of the United Kingdom has purchased all available surpluses, after provision was made for Canadian and New Zealand requirements, for each season from the Commonwealth Government. Prices ranged from £A.37 per ton f.o.b. for currants to £A.52 per ton f.o.b. for sultanias during the 1943 season representing a substantial increase over pre-war prices.

The sales of dried vine fruits for season 1943 in Australia amounted to 25,204 tons while 65,171 tons were exported overseas, of which the United Kingdom bought 42,810 tons, Canada 15,830 tons and New Zealand 5,770 tons.

## § 16. Orchards and Fruit-Gardens.

1. **Progress of Cultivation.**—The greatest area of orchards and fruit-gardens was attained in 1933-34 when 281,989 acres were planted. The total area of orchards and fruit-gardens in the several States during the last five years is given in the following table:—

### ORCHARDS AND FRUIT-GARDENS: AREA.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nthn. Terr.	A.C.T.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1938-39..	85,598	71,300	32,641	28,943	22,029	31,580	50	97	272,238
1939-40..	85,099	70,315	33,014	29,099	22,155	31,074	40	139	270,935
1940-41..	85,420	69,756	32,426	29,392	21,905	30,834	15	150	269,898
1941-42..	83,427	69,413	31,520	29,528	21,593	31,266	..	133	266,880
1942-43..	79,363	69,776	29,029	29,478	21,266	31,337	..	135	260,384

2. **Varieties of Crops.**—(i) *General.* The varieties grown differ in various parts of the States, ranging from such fruits as the pineapple, papaw, mango and guava of the tropics to the strawberry, the raspberry and the currant of the colder parts of the temperate zone. In New South Wales, citrus fruits (oranges, lemons, etc.) occupy the leading position, although apples, peaches, plums, pears, cherries and bananas are extensively grown. The principal varieties grown in Victoria are the apple, peach, pear, orange, plum and apricot. In Queensland, the banana, pineapple, apple, orange, peach and plum are the varieties most largely cultivated. In South Australia, in addition to the apple, orange, apricot, plum, peach and pear, the almond and the olive are extensively grown. In Western Australia, the apple, orange, pear, plum, peach, apricot and fig are the chief varieties. In Tasmania, the apple occupies nearly four-fifths of the fruit-growing area, but small fruits, such as the currant, raspberry and gooseberry, are extensively grown, while the balance of the area is taken up with the pear, apricot, plum and cherry. The following table gives the acreage—bearing and non-bearing—of the principal kinds of fruit, and the quantity and value of fruit produced.

(ii) *Area.* The table hereunder shows the total acreage for 1942-43 :—

### ORCHARDS AND FRUIT-GARDENS : AREA, 1942-43.

Fruit.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Apples ..	13,456	24,451	4,054	9,537	13,234	22,843	97	87,672
Apricots ..	1,883	4,500	230	3,586	499	1,432	7	12,137
Bananas ..	12,457	..	7,526	..	175	..	..	20,158
Cherries ..	2,867	1,380	5	1,124	17	113	3	5,509
Citrus—								
Oranges ..	22,324	4,220	2,880	4,464	2,947	..	..	42,012
Mandarins ..	3,295							
Lemons ..	3,561							
Other ..	863							
Nectarines and		1,650	436	424	695	..	..	8,299
Peaches ..	8,105	14,308	1,148	1,895	876	85	8	26,425
Nuts ..	643	582	188	3,203	282	..	2	4,900
Pineapples ..	199	..	6,974	..	..	..	..	7,173
Pears ..	3,445	13,160	278	1,882	943	2,481	7	22,196
Plums and Prunes	4,610	3,449	900	2,159	914	404	7	12,443
Other Small Fruits	26	632	144	255	7	3,915	..	4,979
Other Fruits ..	1,629	1,444	2,077	901	362	64	4	6,481
<b>Total ..</b>	<b>79,363</b>	<b>69,776</b>	<b>29,029</b>	<b>29,478</b>	<b>21,266</b>	<b>31,337</b>	<b>135</b>	<b>260,384</b>

(iii) *Production.*—(a) *Quantities.* The production in 1942-43 is shown in the next table :—

### ORCHARDS AND FRUIT-GARDENS : PRODUCTION, 1942-43.

Fruit.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Australia.
Apples .. bushel	628,418	845,184	231,253	789,299	1,613,492	5,742,800	995	9,851,441
Apricots .. "	234,441	422,100	12,662	337,799	51,817	51,830	203	1,110,852
Bananas .. "	1,716,288	..	652,937	..	38,772	..	..	2,407,997
Cherries .. "	137,116	47,081	104	46,896	207	7,100	26	238,530
Citrus—								
Oranges .. "	1,645,411	511,000	194,716	573,017	287,152	..	..	3,211,296
Mandarins .. "	127,637	15,500	112,628	20,133	12,167	..	..	288,065
Lemons .. "	222,698	128,210	53,601	37,920	82,608	..	..	525,037
Other .. "	89,319	30,000	14,184	11,442	10,448	..	..	155,393
Nectarines and								
Peaches .. "	652,902	1,190,819	63,915	112,124	55,634	14,881	124	2,090,399
Nuts .. lb.	319,249	228,358	17,123	899,690	51,744	..	71	1,516,235
Pineapples .. dozen	25,899	..	1,942,778	..	..	..	..	1,968,677
Pears .. bushel	353,863	1,581,841	20,780	231,712	129,653	519,300	78	2,837,227
Plums and Prunes ..	384,111	247,415	60,421	87,389	73,487	74,300	243	927,366
Other Small Fruits owt.	133	11,797	2,438	5,731	235	356,877	..	377,211

(b) *Gross Values.* The gross value of production for the various classes of fruit for the year 1942-43 is given in the following table:—

ORCHARDS AND FRUIT-GARDENS : VALUE OF PRODUCTION, 1942-43.

Fruit	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Australia.
	£	£	£	£	£	£	£	£
Apples .. ..	552,110	485,081	170,316	466,215	491,035	1,188,200	874	3,304,691
Apricots .. ..	257,860	108,840	17,391	181,014	48,074	10,930	223	690,332
Bananas .. ..	1,515,160	..	546,252	..	69,897	..	..	2,131,309
Cherries .. ..	252,110	56,497	405	75,034	1,121	4,700	48	389,915
Citrus—								
Oranges .. ..	1,441,390	437,000	174,806	388,283	163,916	..	..	2,605,395
Mandarins .. ..	90,560	12,013	105,588	(a)	10,290	..	..	218,451
Lemons .. ..	166,270	96,157	33,475	22,752	33,731	..	..	352,385
Other .. ..	66,320	15,000	10,007	8,009	6,289	..	..	105,625
Nectarines and Peaches	440,020	494,820	46,957	75,701	63,361	3,660	89	1,134,610
Nuts .. ..	17,680	14,111	211	30,397	0,051	..	..	74,454
Pineapples .. ..	15,610	..	759,112	..	..	..	..	774,722
Pears .. ..	243,710	573,477	12,132	116,800	37,660	116,100	54	1,098,863
Plums and Prunes ..	312,130	78,559	73,240	58,187	50,336	16,710	210	595,374
Other Small Fruits ..	1,360	40,402	157,945	13,969	2,022	305,920	..	717,131
Other Fruits .. ..	78,920	39,549	54,840	20,760	1,420	..	24	..
Total .. ..	5,461,140	2,512,355	2,116,827	1,497,324	1,010,445	1,653,640	1,526	14,253,257

(a) Included with Oranges.

3. *Principal Fruit Crops.*—(i) *Area.* The area in Australia of the principal fruit crops for the year 1913-14 and for each of the last five years is shown hereunder:—

PRINCIPAL FRUIT CROPS : AREA, BEARING AND NON-BEARING, AUSTRALIA.

Year.	Apples.	Bananas.	Citrus Fruits.	Peaches.	Pears.	Plums.(a)
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1913-14 ..	56,577	7,778	24,840	13,645	9,657	8,410
1938-39 ..	97,351	22,900	46,955	25,054	21,587	14,119
1939-40 ..	97,173	23,172	46,845	24,719	21,611	13,579
1940-41 ..	92,363	23,676	47,415	25,764	23,404	13,152
1941-42 ..	90,379	21,169	47,843	26,839	22,710	13,501
1942-43 ..	87,672	20,158	50,311	25,109	22,196	12,443

(a) Includes prunes.

(ii) *Production*—(a) *Quantities.* In the next table the production of the principal varieties of fruit grown in Australia is shown for the same periods:—

PRINCIPAL FRUIT CROPS : PRODUCTION IN AUSTRALIA.

('000 omitted.)

Year.	Apples.	Bananas.	Citrus Fruits.	Peaches.	Pears.	Plums.(a)
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1913-14 ..	5,000	836	1,639	930	951	622
1938-39 ..	11,126	2,494	5,644	2,523	2,300	771
1939-40 ..	9,323	2,522	4,717	2,002	2,290	867
1940-41 ..	12,165	2,610	5,472	2,369	2,921	950
1941-42 ..	10,531	2,491	5,196	2,121	2,208	851
1942-43 ..	9,851	2,408	4,180	2,036	2,837	927

(a) Includes prunes.



(b) *Values.* The value of the principal fruit crops during the periods mentioned is given in the following table:—

**PRINCIPAL FRUIT CROPS : VALUE OF PRODUCTION, AUSTRALIA.**

Year.	Apples.	Bananas.	Citrus Fruits.	Peaches.	Pears.	Plums.(a)
	£	£	£	£	£	£
1913-14 ..	1,132,427	157,710	719,808	306,433	258,235	135,654
1938-39 ..	3,357,817	1,206,879	1,916,912	737,791	674,887	232,681
1939-40 ..	2,479,710	1,256,421	1,966,786	745,233	667,134	330,087
1940-41 ..	2,521,185	1,250,663	1,894,067	737,647	779,416	297,332
1941-42 ..	2,446,589	1,456,056	2,615,223	816,595	679,518	379,725
1942-43 ..	3,364,691	2,131,309	3,281,856	1,084,036	1,098,863	595,374

(a) Includes prunes.

4. *Imports and Exports of Fruit.*—(i) *General.* The import trade in fresh fruits declined heavily when a Customs duty of 1d. per lb. was imposed in 1920-21 on imported bananas. Under the terms of the agreement reached at Ottawa in 1932, however, 40,000 cents of bananas may be admitted annually from Fiji at the rate of duty of 2s. 6d. per cental. The imports of dried fruits at present consist mainly of dates. A considerable export trade in both fresh and dried fruits is carried on by Australia with oversea countries. The value of the shipments in 1942-43 amounted to £191,129 and £2,276,642 respectively. Apples formerly constituted the bulk of the fresh fruit exported although the exports of citrus fruits and pears were fairly considerable. Shipments of raisins and currants have increased greatly since 1914-15, and are mainly responsible for the growth in the dried fruits exports. Dried apricots also figure amongst the exports.

(ii) *Fresh Fruits.* Particulars of the Australian oversea trade in fresh fruits are shown in the following table:—

**FRESH FRUITS : IMPORTS AND EXPORTS, AUSTRALIA.**

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Cental.	£A	Cental.	£A	Cental.	£A
1938-39 ..	69,883	29,843	2,752,437	2,022,936	2,682,554	1,993,093
1939-40 ..	57,852	36,791	1,222,089	1,166,691	1,164,237	1,129,900
1940-41 ..	36,028	15,892	351,626	393,098	315,598	377,206
1941-42 ..	16,719	8,977	226,746	238,919	210,027	229,942
1942-43 ..	1,959	2,370	133,284	191,129	131,325	188,759

(iii) *Exports of Apples, Pears and Citrus Fruits.* The quantity and value of apples, pears and citrus fruits exported during each of the last five years are shown in the following table:—

**APPLES, PEARS AND CITRUS FRUITS : EXPORTS FROM AUSTRALIA.**

Year.	Apples.		Pears.		Citrus Fruits.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Cental.	£	Cental.	£	Cental.	£
1938-39 ..	2,111,139	1,433,440	294,930	264,805	274,229	221,184
1939-40 ..	827,299	741,854	117,523	134,589	232,644	211,546
1940-41 ..	87,651	105,140	3,371	5,143	231,843	222,381
1941-42 ..	31,448	41,699	809	1,123	190,348	191,141
1942-43 ..	10,434	19,024	1,073	1,974	117,908	165,830

(iv) *Dried Fruits.* The quantity and value of overseas imports and exports of dried fruits, other than raisins and currants, for the last five years are shown below; more than 90 per cent. of the total imports consisted of dates obtained almost entirely from Iraq:—

DRIED FRUITS<sup>(a)</sup> : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Imports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	'000 lb.	£A	'000 lb.	£A	'000 lb.	£A
1938-39 ..	11,097	80,752	3,927	117,814	7,170	(b) 37,062
1939-40 ..	11,327	135,107	1,486	58,912	9,841	76,195
1940-41 ..	9,349	108,920	3,565	129,741	5,784	(b) 20,821
1941-42 ..	7,735	102,245	5,428	175,736	2,307	(b) 73,491
1942-43 ..	23	323	2,428	105,265	(c) 2,405	(b) 104,942

(a) Excludes raisins and currants referred to separately under Vineyards, § 15 par. 4. (b) Export values exceed imports.

(c) Export quantities exceed imports.

(v) *Jams and Jellies.* Jams and jellies were exported in large quantities during the War of 1914-1919 and in 1918-19 the record shipment of 79,277,560 lb., valued at £1,847,970, was dispatched from Australia. Since then the trade had declined, but in 1940-41 and 1941-42 the exports increased by 83 and 65 per cent. respectively over that of 1939-40, but declined sharply to 18,276,000 lb. in 1942-43. Particulars of imports and exports during each of the last five years are as follows:—

## JAMS AND JELLIES : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	'000 lb.	£A	'000 lb.	£A	'000 lb.	£A
1938-39 ..	81	3,253	13,872	262,486	13,791	259,233
1939-40 ..	77	3,006	24,446	506,002	24,369	502,996
1940-41 ..	13	470	44,909	929,458	44,896	928,988
1941-42 ..	21	877	40,514	960,937	40,493	960,060
1942-43 ..	42	1,359	18,276	498,097	18,234	496,738

(vi) *Preserved Fruit.* (a) *Imports and Exports.* Details concerning the quantities and values of preserved fruit imported into Australia cannot readily be obtained, owing to the fact that in the Customs returns particulars concerning fruit and vegetables are in certain cases combined. The total value of fruit and vegetables preserved or partly preserved in liquid, or pulped, imported into Australia during 1942-43 was £18,536,4 or £6,718 in Australian currency. Oversea exports in 1942-43 were as follows:—Apricots, 231,290 lb., £5,619; peaches, 3,832,573 lb., £79,687; pears, 1,170,956 lb., £25,228; pineapples, 386,740 lb., £8,986; and other, 9,429,280 lb., £202,084; or a total shipment valued at £321,604.

(b) *War-time Contract.* Two contracts were negotiated between the Commonwealth and United Kingdom Governments whereby the latter undertook to purchase the exportable surplus of the 1940 pack of Australian canned apricots, peaches and pears. Similar arrangements were concluded for the purchase of the 1941 pack but the Defence Services took most of the 1942 and 1943 packs.

5. **Apple and Pear Acquisition.**—The development of the apple and pear industry is dependent upon the expansion of exports; normally, little more than half of Australia's production is needed to meet the local demand. The interruption to exports due to the war imposed a severe strain on the industry and to meet such conditions the Commonwealth Government introduced the National Security (Apple and Pear Acquisition) Regulations to provide for the acquisition and orderly marketing of the 1940 crop.

In 1941 the Australian Apple and Pear Board was appointed as the marketing authority, and a Marketing Committee of the Board, with a committee in each State, was set up to supervise the whole of the marketing arrangements in Australia and for export. The marketing of each season's crop since the war started has been so controlled, and the disposal of apples and pears for season 1943-44 under the 1944 (No. 5) Acquisition totalled 3,317,333 bushels and 183,129 bushels respectively. Further particulars may be found in Chapter XXVII. "Miscellaneous".

## § 17. Minor Crops.

1. **General.**—In addition to the crops previously dealt with, there are many others which, owing either to their nature, or to the fact that their cultivation has advanced but little beyond the experimental stage, do not occupy so prominent a position. Some of the more important of these are included under the headings—Market-Gardens, Pumpkins and Melons, Nurseries, Grass Seed, Tobacco and Millet. Cotton-growing has received considerable attention in the tropical portions of Queensland, and the prospects of establishing this industry are hopeful. The total area in Australia during the season 1942-43 devoted to crops not dealt with in previous sections was 370,500 acres, the major portion of which consisted of cotton, market-gardens, grass seed, flax, pumpkins and melons, tomatoes and tobacco.

2. **Market-Gardens.**—Under this head are included all areas on which mixed vegetables are grown. Where considerable areas are devoted to the production of one vegetable, such for instance as the potato, the onion, the melon, the tomato, etc., the figures are usually not included with market-gardens, but are shown either under some specific head, or under some general head as "Other Root Crops" or "All Other Crops". The area of market-gardens during each of the last five seasons is given hereunder:—

### MARKET-GARDENS : AREA.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aus- tralia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1938-39 ..	7,528	21,059	1,546	1,691	3,292	508	41	35,665
1939-40 ..	7,841	24,414	1,510	1,623	3,754	513	53	39,708
1940-41 (a) ..	7,640	22,155	1,384	1,658	3,506	554	58	36,997
1941-42 ..	29,992	15,330	6,846	3,668	2,591	840	11	59,278
1942-43 ..	34,881	19,378	9,769	4,268	3,241	1,247	22	72,806

(a) Includes 42 acres in Northern Territory.

3. **Grass and Other Seed.**—Particulars of the area of crops grown for seed cannot be accurately determined as seed is obtained from certain crops such as clover, lucerne, etc., at a second cutting. The production of seed recorded in 1942-43 was 487,477 cwt.



4. Tobacco.—(i) *General.* Tobacco-growing years ago promised to occupy an important place amongst the agricultural industries of Australia. As early as the season 1888–89, the area of this crop amounted to 6,641 acres, of which 4,833 were in New South Wales, 1,685 in Victoria, and 123 in Queensland. This promise was, however, not fulfilled, and after numerous fluctuations, in the course of which the Victorian area rose in 1895 to over 2,000 acres, and that in Queensland to over 1,000 acres, the total area declined considerably.

(ii) *States, Area and Production.* The expansion of the tobacco-growing industry was hoped for as a war-time measure, but for the year 1942–43, the area of 7,169 acres and production of 5,000,000 lb. represented a decrease on the previous year of 1,651 acres and a production of more than 2,000,000 lb.

In all the States where its cultivation has been tried, the soil and climate appear to be suitable for the growth of the plant, and the large import of tobacco in its various forms is an index of the market for a satisfactory product.

In the following table particulars of the area and production of tobacco are given by States for each year since 1933–34, and for the decennium ended 1942–43 :—

## TOBACCO : AREA AND PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Total.
AREA IN ACRES.								
1933–34 ..	1,187	8,900	2,081	467	291	100	..	13,026
1934–35 ..	560	4,765	3,117	151	313	55	..	8,961
1935–36 ..	934	5,840	3,973	141	426	80	..	11,394
1936–37 ..	851	5,492	3,812	102	1,041	113	..	11,411
1937–38 ..	610	4,736	3,740	90	1,216	159	..	10,551
1938–39 ..	629	2,559	3,653	39	908	130	1	7,919
1939–40 ..	717	2,018	4,402	2	1,019	105	25	8,281
1940–41 ..	988	1,926	4,304	2	1,313	15	..	8,548
1941–42 ..	953	2,232	4,341	..	1,288	6	..	8,820
1942–43 ..	823	1,850	3,149	..	1,347	..	..	7,169
Average 10 seasons ended 1942–43	825	4,032	3,657	99	916	76	3	9,608

## PRODUCTION OF DRIED LEAF.

'000 lb.

1933–34 ..	425	1,471	1,025	114	199	60	..	3,294
1934–35 ..	230	1,501	1,555	23	289	45	..	3,643
1935–36 ..	667	2,879	2,005	31	352	73	..	6,007
1936–37 ..	606	1,754	2,317	24	666	143	..	5,510
1937–38 ..	409	2,336	2,197	14	789	115	..	5,860
1938–39 ..	398	720	2,094	13	767	54	..	4,046
1939–40 ..	524	1,098	2,596	(a)	712	18	9	4,957
1940–41 ..	962	1,197	2,328	..	984	5	..	5,476
1941–42 ..	836	2,226	2,884	..	1,093	1	..	7,040
1942–43 ..	772	1,017	1,843	..	1,337	..	..	4,969
Average 10 seasons ended 1942–43	583	1,620	2,084	22	719	51	1	5,080

(a) No leaf produced.

(iii) *Australian Tobacco Board.* The Australian Tobacco Board was constituted in May, 1941, for the purpose of regulating the marketing of Australian-grown tobacco leaf, which must be submitted to the Board for appraisement.

(iv) *Tariff Board Inquiries.* The tobacco industry has been the subject of a number of investigations. The Tariff Board inquired into this industry in 1926, 1931 and 1940 and reports were issued.

(v) *Tobacco Inquiry Committee.* The Tobacco Inquiry Committee, which was appointed by the Commonwealth Government to investigate certain aspects of the industry in North Queensland, presented its report in 1933. Recommendations made included the payment of a sum of £20,000 annually for a period of five years to assist the States to continue economic and scientific investigations. This was adopted and the distribution was spread between the years 1934-1938 as follows:—£5,000 to the Council for Scientific and Industrial Research, £3,750 to each of the States of New South Wales, Victoria and Queensland, and £1,250 each to South Australia, Western Australia and Tasmania.

A further grant of £62,500 which was increased by £11,250 in 1941 was allotted by the Commonwealth Government, to be paid periodically between the years 1939 to 1943. The amount of £73,750 was allocated as follows:—Council for Scientific and Industrial Research, £25,000; and £10,000 annually, among the States for 5 years 1939 to 1943 excepting the year 1940 when £8,750 was paid.

The Council for Scientific and Industrial Research is investigating diseases effecting the tobacco plant, including work on disease-resisting varieties, and is making tests of smoking quality. The Council has been successful in discovering effective means of preventing blue mould, which has seriously retarded the development of the industry. The States are carrying out field investigations on disease resistance, selection, yield and quality improvement, and are conducting instructional, demonstrational and field experimental work.

(vi) *Tobacco Factories.* In 1942-43, the quantity of stemmed leaf used in tobacco factories in Australia amounted to 24.3 million lb. of which 5.0 million was of local origin and the balance was imported chiefly from the United States of America.

(vii) *Imports.* The total net imports of tobacco into Australia during the year 1942-43 were valued at £A112,320, while the net value of unmanufactured tobacco imported was £A1,280,175.

5. **Pumpkins and Melons.**—The total area of this crop in Australia during 1942-43 was 55,944 acres, of which 7,390 acres were in New South Wales, 3,398 acres in Victoria, 42,075 acres in Queensland, 1,365 acres in South Australia, 1,660 acres in Western Australia, 49 acres in Tasmania and 7 acres in the Australian Capital Territory. The production for Australia amounted to 143,817 tons.

6. **Hops.**—Hop-growing in Australia is practically confined to Tasmania and some of the cooler districts of Victoria, the total area for 1942-43 being 1,314 acres, of which 1,143 acres were in Tasmania, 148 acres in Victoria and a small area of 23 acres in Western Australia. The Tasmanian area, though still small, has increased during the present century, the total for 1901-2 being 599 acres. In Victoria the area, which in 1901-2 was 307 acres, dwindled to 71 acres in 1918-19, then rose to 312 acres in 1925-26 and dropped to 173 in 1939-40. The cultivation of hops was much more extensive in Victoria some 50 years ago than at present, the area in 1883-84 being 1,758 acres. During 1942-43 the exports of hops exceeded the imports by 46,628 lb., valued at £A5,464.

7. **Flax.**—For many years flax was grown intermittently in the Gippsland district of Victoria, and attempts were made to introduce its cultivation into Tasmania and New South Wales, but without success. About the end of 1917 the shortage of flax fibre was acute, and endeavours were made by the Commonwealth Government to encourage local cultivation. The acreage in Victoria increased from 419 acres in 1917-18 to 1,611 acres in 1919-20, but fell to 179 acres in 1928-29. As the result of a bounty introduced in 1930 the area increased to 1,216 acres in 1930-31, but this expansion was not maintained during the years following. In 1942-43, however, following another attempt commenced in 1938-39 to re-establish the industry, 26,173 acres were planted

in this State compared with 25,527 acres in the previous year. Acreages planted in other states 1942-43 were:—South Australia, 9,818 acres, Western Australia, 8,785 acres, and Tasmania, 11,964 acres.

The linseed flax industry has been the subject of two investigations during recent years, namely, in 1933 and in 1936 (see Official Year Book, No. 32, p. 658).

Bounty was paid on flax and linseed grown in Australia between the years 1907 and 1918 and again for a period of five years ending 28th February, 1935. During these periods the total amounts disbursed as bounty were £2,376 and £2,839 respectively.

As a war-time need, the flax-growing industry was rapidly expanded. Owing to the failure of supplies from European countries, the British Empire is experiencing a shortage of flax necessary for war and civil needs. Arrangements were made to increase the area sown to flax and in 1942-43 the total area sown to flax for fibre in Australia was 56,740 acres, producing 47,511 tons of straw from which fibre as well as linseed is obtained. Fibre and tow produced is being sold to the Government of the United Kingdom at prices already arranged.

8. Millet.—Millet figures in the statistical returns of three of the States. The total area devoted thereto in 1942-43 was 1,574 acres, of which 946 acres were in New South Wales, 488 in Victoria, and 140 in Queensland. The particulars here given relate to millet grown for grain and fibre, the quantity for green fodder being dealt with in the section relating thereto.

9. Nurseries.—In all the States fairly large areas are occupied as nurseries. Figures in regard to acreages under flowers, fruit-trees, etc., are available for New South Wales, Victoria, South Australia, Western Australia, and Tasmania. During 1942-43 the areas in these States were 490, 770, 149, 145 and 347 acres respectively.

10. Cotton.—(i) *General*. The production of cotton in Australia is restricted to Queensland where cultivation began in 1860, and ten years later the area cropped had increased from 14 acres to over 14,000 acres. The reappearance of American cotton in the European market on the conclusion of the Civil War gave a severe setback to the new industry, and the area declined continuously until 1888, when only 37 acres were planted. Later on the industry was revived, and manufacturing on a small scale was undertaken on two separate occasions at Ipswich, but low prices over a term of years checked development.

(ii) *Bounties, etc.* In 1913 the Queensland Government made an advance of 1½d. per lb. on seed cotton, and ginned it on owner's account, the final return being equal to about 1¾d. per lb. The rise in price enabled the Government to offer a guarantee of 5½d. per lb. for seeded cotton of good quality for the three years ended 31st July, 1923, and the areas picked increased from 166 acres in 1920 to 50,186 acres in 1924. Guarantees were continued until 1926, when the Commonwealth Government granted a bounty varying from ¾d. to 1½d. per lb. according to grade. In addition, the cotton-manufacturing industry received a graduated bounty on all cotton yarn manufactured in Australia which contained 50 per cent. of home-grown cotton. This bounty, however, ceased to operate after 30th June, 1932. The cotton-growing industry was further assisted by the Bounty Act of 1934, which extended the period to 1940 at varying rates of bounty.

The Raw Cotton Bounty Act 1940 provided an extension of assistance for a further period of five years ended 31st December, 1945.

(iii) *Expansion of the Cotton-growing Industry*. The increased demand for raw cotton to meet Australia's war and civil needs has stimulated production. At present Australia is producing less than one-third of its requirements and efforts are being directed to reduce the nation's dependence upon imported raw cotton obtained chiefly from the United States of America and India. Production is to be increased by means of an extension of area and the introduction of irrigation methods. The expansion of the industries connected with the spinning and weaving of cotton is referred to in Chapter XIX. "Manufacturing Industry".



The area under cultivation and the production in Queensland since the year 1932 are shown herunder :—

### COTTON : AREA AND PRODUCTION IN QUEENSLAND.

Season Ended September.	Area Harvested.	Production of Cotton.			Average Yield per Acre Harvested.	
		Unginned.	Ginned.	Ginned Equivalent in Bales.(a)	Unginned.	Ginned.
	Acres.	lb.	lb.	Bales.	lb.	lb.
1932 ..	29,995	6,270,116	2,018,977	3,989	209	67
1933 ..	68,203	17,718,306	5,545,830	10,974	260	81
1934 ..	43,397	26,924,179	8,777,282	17,471	620	202
1935 ..	54,947	20,785,418	7,067,042	14,515	378	129
1936 ..	62,200	19,198,600	6,653,973	13,504	309	107
1937 ..	52,692	11,792,828	4,113,684	8,519	224	78
1938 ..	66,470	13,687,872	4,773,936	9,654	206	72
1939 ..	41,212	17,527,709	6,182,808	12,447	424	150
1940 ..	41,262	12,108,491	4,127,823	8,370	295	100
1941 ..	61,365	15,869,159	5,416,095	10,803	259	88
1942 ..	56,433	14,057,690	4,797,846	9,596	249	85

(a) Bales of 500 lb.

11. **Coffee.**—Queensland is the only State in which coffee has been grown to any extent, and the results have not been satisfactory. The area of this crop reached its highest point in the season 1901-2 with 547 acres. Thereafter the acreage fluctuated, but on the whole with a downward tendency, and in 1942-43 only 9 acres were recorded with a production of 6,384 lb.

12. **Other Crops.**—Miscellaneous small crops grown in Australia include rhubarb, artichokes, arrowroot, chicory and flowers.

### § 18. Bounties.

1. **Bounties.**—The bounties paid by the Commonwealth Government during the year ended 30th June, 1943, amounted to £741,715. This amount refers only to bounties paid under the Bounties Acts and does not include financial assistance given to wheat-growers and other primary producers under other Acts. Particulars of the assistance so rendered by the Commonwealth Government are furnished hereafter. Details of the amounts paid as bounty during the years 1938-39 to 1942-43 are as follows :—

#### BOUNTIES : AUSTRALIA.

Articles on which Bounty was Paid.	Rate of Bounty Payable.	Date of Expiry of Bounty.	Amount Paid.				
			1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
Iron and Steel Products Bounty Act—			£	£	£	£	£
* Wire Netting ..	12s. per ton ..	23rd Oct., 1939.	5,736	4,451	..	..	..
Traction Engines ..	According to capacity, £40-£90 per tractor less 10 per cent. from 9th July, 1930, increased to 16 per cent. from 7th November, 1930, and to 40 per cent. from 11th July, 1931. Restored to original rate from 4th December, 1933	23rd Oct., 1939.	17,313	6,052	221	..	..
* Manufactured from Materials pro- duced and manu- factured in Aus- tralia							
Wire Netting Bounty Acts 1939 .. ..	9s. 7d. per ton ..	23rd Oct., 1944.	..	83	567	369	421

## BOUNTIES : AUSTRALIA—continued.

Articles on which Bounty was Paid.	Rate of Bounty Payable.	Date of Expiry of Bounty.	Amount Paid.				
			1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
Tractor Bounty Acts 1939	According to capacity, £32-£72	23rd Oct., 1944.	£ ..	£ 6,400	£ 6,750	£ 1,108	£ 850
Motor Industry Bounty Act— Radiator Assembly ..	10s. each ..	6th Dec., 1940.	..	2,396	1,287	..	..
Sulphur Bounty Act 1923— Sulphur from Australian Pyrites and other Sulphide Ores or Concentrates	£2 5s. per ton ..	23rd Oct., 1939.	87,575	55,036	..	..	..
Sulphur Bounty Acts 1939	Varies according to imported cost of sulphur	23rd Oct., 1944.	..	..	..	..	..
Wine Export Bounty Act 1934— Fortified Wine, containing not less than 34 per cent. of proof spirit, exported from Australia from 1st March, 1935, to 29th February, 1940	1s. 3d. per gallon from 1st March, 1935, to 28th February, 1937, reduced by 1d. per annum as from March, 1937 to 1s. per gallon in 1940	29th Feb., 1940.	167,872	..	..	..	..
Wine Export Bounty Act 1939-1940	1s. per gallon from 1st March, 1940	28th Feb., 1945.	..	146,592	56,547	38,610	15,049
Raw Cotton Bounty Act 1934— Raw cotton produced in Australia and graded as prescribed	5½d. per lb. to 30th November, 1935, 4½d. to 30th November, 1936, and 4½d. per lb. to 30th November, 1940, fluctuating according to variations in Liverpool spot price	30th Nov., 1940.	115,012	60,391	14,523	..	..
Raw Cotton Bounty Act 1940-1941	To 31st December, 1941, 4½d. per lb. To 31st December, 1942, 4½d. per lb. 25s. per ton ..	31st Dec., 1945.	..	..	35,390	..	..
Superphosphate Bounty Act 1941	..	..	..	..	..	38,439	493,136
Primary Producers Relief (Superphosphate) Act 1943	As determined ..	As determined	..	..	..	779,816	77,442
Cable and Wire Bounty Act 1941— Rubber insulated cable and wire	4d. per lb. of copper wire used	..	..	..	..	8,892	3,502
Papua and New Guinea Bounties Act— Cocoa Beans ..	1½d. per lb. ..	31st Dec., 1947.	2,885	3,595	4,722	4,862	13
Bamboos and Rattans (Unmanufactured)	£4 per ton ..	..	27	..	18	9	..
Manila, Sisal and Other Hemp Fibres	£6 ..	..	2	..	..	..	..
Coir Fibre ..	£3 ..	..	45	239	264	..	..
Kapok ..	2d. per lb. ..	..	..	..	2	17	..
Fruit Exported— Oranges, Lemons, Grape Fruit and Mandarins	Varies from 1s. to 2s. per case	31st Dec., 1940.	9,820	3,872	1,953	..	..
Total ..	.. ..	..	406,287	289,107	122,244	872,122	741,715

(a) Year ended December, 1942.

2. Other Financial Assistance.—In addition to the payment of bounties mentioned in the preceding paragraph, financial assistance has been granted by the Commonwealth Government for the relief of wheat-growers, fruit-growers and other primary producers. The amounts shown exclude such items as the expenditure on cattle tick control, banana industry, tobacco investigation and apple and pear research, which indirectly benefits the industries concerned, and exclude loans made to States to alleviate hardship suffered by primary producers in consequence of drought. The distribution as bounty, relief or subsidy has been made in the following manner:—

AMOUNTS PAID BY THE COMMONWEALTH GOVERNMENT AS GRANTS TO ASSIST  
PRIMARY PRODUCERS : AUSTRALIA.

Amounts paid to—	Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
		£	£	£	£	£	£	£	£
Wheat-growers as—									
Bounty (a) ..	1931-32	950,546	820,635	64,620	874,630	716,826	2,057	..	3,429,314
Relief ..	1932-33	570,902	442,421	40,744	507,138	436,145	2,342	308	2,000,000
Relief ..	1933-34	911,094	603,586	76,455	764,543	639,493	(b) 57,024	805	3,053,000
Bounty (a) ..	1934-35	531,593	285,000	45,717	300,687	296,652	2,543	222	1,462,414
Special Relief ..	1934-35	100,000	192,000	12,000	127,000	137,000	5,250	..	573,250
Relief ..	1934-35	590,000	400,000	42,740	503,545	434,527	(b) 33,906	226	2,004,944
Relief ..	1935-36	565,327	441,948	42,835	432,146	392,850	(b) 40,403	360	1,915,869
Relief ..	1936-39	558,489	307,564	70,824	398,559	421,296	(b) 51,961	..	1,808,693
Relief ..	1939-40	910,839	415,119	109,805	436,667	497,888	(b) 114,716	1,033	2,486,067
Relief ..	1940-41	477,819	246,328	47,878	413,661	263,615	(b) 49,292	..	1,498,593
Relief (Drought) ..	1940-41	320,000	250,000	..	200,000	200,000	..	..	970,000
Relief ..	1941-42	521,513	392,335	29,789	359,614	294,332	(b) 54,133	..	1,651,716
Relief (Drought) ..	1941-42	..	..	15,000	..	..	623	..	15,623
Relief ..	1942-43	447,593	424,584	40,009	470,817	269,953	(b) 55,587	..	1,708,543
Total ..	..	7,455,715	5,221,520	638,416	5,789,007	5,535,577	(d) 469,837	2,954	(d) 25,113,026
Fruit-growers as—									
Relief (c) ..	1933-34	8,225	36,321	478	5,258	10,918	63,800	..	125,000
Relief (c) ..	1934-35	12,538	22,299	2,103	13,116	14,713	70,231	..	135,000
Total ..	..	20,763	58,620	2,581	18,374	25,631	134,031	..	260,000
Primary Producers (other than wheat-growers)—									
Manure subsidy ..	1932-33	19,903	88,697	32,588	34,930	50,823	17,711	32	244,684
Manure subsidy ..	1934-35	23,000	95,000	21,000	46,000	52,000	13,000	..	250,000
Manure subsidy ..	1935-36	56,211	203,324	40,944	99,610	105,821	28,127	94	534,131
Manure subsidy ..	1936-37	40,058	129,637	25,144	59,136	58,327	14,610	88	327,000
Manure subsidy ..	1937-38	30,048	99,746	18,828	48,000	53,028	12,450	66	262,166
Manure subsidy ..	1938-39	18,290	76,500	19,020	36,400	43,260	12,460	90	206,020
Manure subsidy ..	1939-40	427	17,100	4,320	783	320	250	..	23,200
Manure subsidy ..	1941-42	118,939	255,755	21,600	166,219	197,201	20,103	..	779,817
Manure subsidy ..	1942-43	98,391	204,541	18,923	120,956	157,200	31,341	..	631,352
Dairying Industry	1942-43	277,079	430,100	365,532	49,529	42,275	21,791	..	1,186,306
Total ..	..	682,346	1,600,400	567,899	661,563	760,255	171,843	370	4,444,676
Grand Total ..	..	8,158,824	6,880,540	1,208,896	6,468,944	6,321,463	775,711	3,324	29,817,702

(a) Rate of Bounty 4½d. per bushel in 1931-32 and 3d. per bushel in 1934-35. (b) Includes special grant to Tasmania. (c) Growers of apples, pears and mandarins. (d) Includes Wheat Acreage Restriction Grant of £535,000 for 1942-43.

The moneys granted for the assistance of wheat-growers in 1932-33 and 1933-34 were paid through the Governments of the States on an acreage basis. In 1934-35, in accordance with the recommendations of the Royal Commission on the wheat industry,



assistance took the form of a bounty of 3d. per bushel, supplemented by a further relief payment of 3s. per acre. Further special relief was given to those farmers who were adversely affected by the weather conditions of the 1934-35 season. Altogether, the amount paid during 1934-35 for the benefit of wheat-growers exceeded £4 million. For the year 1935-36 the amount paid by the Commonwealth Government as relief was £1,915,869. No financial assistance was made to wheat-growers by the Commonwealth Government during the years 1936-37 and 1937-38. In 1938-39, however, a sum of £1,808,693, collected through the medium of a flour tax, was allocated for distribution as relief to wheat-growers. From the same source, a sum of £1,651,716 was allocated to the States for the same purpose during 1941-42 and £1,708,543 in 1942-43.

The relief granted to fruit-growers was paid to growers of apples, pears and mandarins. Assistance has been given to primary producers other than wheat-growers, in the form of a manure subsidy; the rate was 15s. for each ton of artificial manure used in the production of primary produce, but in 1936-37 this was reduced to 10s. per ton. The payment of this subsidy ceased on 30th June, 1939, but was resumed one year later. During the period 1932-33 to 1942-43, more than £4,444,000 was distributed in this manner. Finally relief amounting to £1,186,306 was paid in 1942-43 to the dairying industry.

Because of the substantial increases in the price of superphosphate and their effect on the efficiency of the farming industry, the Commonwealth Government introduced a bounty on superphosphate produced and sold in Australia after 1st July, 1941. The rate of bounty was fixed at 25s. per ton and payable to manufacturers who were required to adjust their prices so that consumers received the full benefit of the subsidy while the price was stabilized during year 1942-43 (see page 833). The Cable and Wire Bounty Act, introduced in 1941, provided for the payment of a bounty in respect of rubber insulated cable and wire at the rate of 4d. per lb. of copper wire used. The amount paid in 1941-42 was £8,892 and in 1942-43 was £3,502.

In addition to the assistance outlined above the Loan (Farmers' Debt Adjustment) Act 1935 made provision for grants, totalling £12 million, to be made available to the States for the adjustment of farmers' debts. Of this amount £10 million was allocated as follows:—New South Wales, £3,450,000; Victoria, £2,500,000; Queensland, £1,150,000; South Australia, £1,300,000; Western Australia, £1,300,000; and Tasmania, £300,000. The remaining £2 million was allocated in the same proportion, and was subject to review at a later date.

## § 19. Fertilizers.

1. **General.**—In the early days of settlement in Australia scientific cultivation was little understood. It was common, as in other new countries, for the land to be cropped continuously to a degree of exhaustion. This practice is much less in evidence now than in the early days of Australian agricultural development. Under the guidance of the State Departments of Agriculture, scientific farming is now much more widely practised. The importance of fallowing, crop rotation, and the application of suitable fertilizers in adequate quantities is now appreciated by farmers. The introduction of the modern seed-drill acting also as a fertilizer-distributor has greatly facilitated the use of artificial manures and much land formerly regarded as useless for cultivation has now been made productive.

2. **Fertilizers Acts.**—In order to protect the users of artificial fertilizers, legislation has been passed in each of the States regulating the sale and prohibiting the adulteration of fertilizers. A list of these Acts and their main features is given in Official Year Book No. 12, p. 378.

3. Imports.—The Australian production of prepared fertilizers is sufficient for local requirements. Imports consist chiefly of rock phosphate, which is used in making superphosphate, a valuable fertilizer for cereals. During 1942-43 the value of rock phosphate imported represented  $97\frac{1}{2}$  per cent. of the total imports of fertilizers.

Sodium nitrate is obtained chiefly from Chile.

The imports of manures during the latest available five-yearly period are given in the following table :—

### FERTILIZERS : IMPORTS INTO AUSTRALIA.

*Australian Currency Values.*

Fertilizer.		1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
Ammonium sulphate	cwt.	710,065	281,259	274,808	2,771	(a)
" "	£	336,872	144,324	167,574	4,619	(a)
Potash salts ..	cwt.	223,202	293,683	121,531	62,887	45,889
" "	£	102,794	146,168	88,464	44,936	53,734
Rock phosphate ..	cwt.	16,008,437	13,408,630	7,501,462	6,219,408	4,503,569
" "	£	1,038,399	847,807	386,500	573,683	388,206
Sodium nitrate ..	cwt.	203,666	297,492	1,297,089	86,539	64,972
" "	£	103,074	147,107	221,450	52,308	36,919
Other ..	cwt.	125,551	1,451	101,194	382	2,774
" "	£	12,237	1,462	7,581	1,221	5,095
Total ..	cwt.	17,270,921	14,282,515	9,296,084	6,371,987	4,617,204
	£	1,593,376	1,286,868	871,569	676,767	483,954

(a) Included with " Other ".

4. Exports.—The following table shows the exports of fertilizers (practically all of which are manufactured locally) for the years 1938-39 to 1942-43 :—

### FERTILIZERS : EXPORTS FROM AUSTRALIA.

Fertilizer.		1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
Ammonium sulphate	cwt.	2,097	2,918	1,266	640	(a)
" "	£	940	1,445	892	460	(a)
Bone-dust ..	cwt.	5,238	15,771	3,612	119	54
" "	£	2,931	7,732	1,633	84	37
Rock phosphate ..	cwt.	61	87	55	..	..
" "	£	143	123	79	..	..
Sodium nitrate ..	cwt.	22	..	72	12	640
" "	£	42	..	99	36	793
Superphosphate ..	cwt.	37,062	49,643	6,191	1,041	426
" "	£	6,182	8,943	1,505	344	143
Other ..	cwt.	53,197	66,010	16,376	13,893	15,039
" "	£	27,323	37,203	9,420	16,013	21,061
Total ..	cwt.	97,677	134,429	27,572	15,705	16,159
	£	37,561	55,446	13,628	16,937	22,034

(a) Included with " Other ".

5. **Quantities Locally Used.**—Information regarding the area fertilized and the quantity used in each State during the year 1942-43 is given in the following table. Details of the area manured with natural manure (stableyard, etc.) have been omitted; in 1940 the quantity used amounted to 678,598 loads:—

**AREA FERTILIZED AND QUANTITY OF FERTILIZERS USED, 1942-43.**

State or Territory.	Artificial Fertilizers (Superphosphate, Bone-dust, Nitrates, etc.).				Total Area Fertilized.	Total Artificial Fertilizers Used.
	Area of Crops Fertilized.		Pasture Lands Top-dressed.			
	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.
New South Wales .. ..	2,490,668	78,641	399,649	16,419	2,890,317	95,060
Victoria .. ..	2,444,332	90,033	2,140,314	94,762	4,584,646	184,795
Queensland .. ..	147,236	24,644	1,427	106	148,663	24,749
South Australia .. ..	2,624,609	97,582	944,560	37,534	3,569,169	135,116
Western Australia .. ..	2,624,612	114,487	1,614,627	48,289	4,239,239	162,776
Tasmania .. ..	244,708	19,495	124,627	5,123	369,335	24,618
Australian Capital Territory ..	4,689	192	4,142	188	8,831	379
Total .. ..	10,580,854	425,074	5,229,346	202,421	15,810,200	627,493

Particulars of the quantity of artificial fertilizers used in each State and Territory during the past ten years are included in the next table. These details include the quantity used in the top-dressing of pasture lands except where indicated by the footnote. The omission of Queensland, as previously mentioned, does not detract from the value of the table as the area involved is considered to be negligible.

The interruption of the imports of rock phosphate due to war has resulted in a serious diminution in the output of superphosphate. It was necessary to introduce a system of rationing and, from 1st January, 1942, consumers received only 60 per cent. of the quantity of superphosphate purchased by them during 1939-40.

**QUANTITY OF ARTIFICIAL FERTILIZERS USED : AUSTRALIA.**

Year.	N.S.W.	Victoria.	Q'land. (a)	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Total. (b)
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1933-34 ..	98,313	217,251	42,517	158,989	203,848	25,844	..	120	746,882
1934-35 ..	101,885	211,657	44,279	157,189	196,741	25,824	..	135	737,710
1935-36 ..	123,472	251,897	40,393	174,593	202,325	27,104	2	166	819,952
1936-37 ..	151,088	306,846	(c) 40,393	208,053	224,473	31,364	4	304	962,525
1937-38 ..	178,369	364,281	66,889	227,547	249,640	33,131	..	357	1,120,214
1938-39 ..	186,569	395,163	61,300	235,443	280,384	33,933	..	432	1,193,224
1939-40 ..	156,071	340,633	61,668	223,694	270,178	35,996	..	510	1,090,050
1940-41 ..	157,425	322,214	71,870	206,303	255,230	37,035	..	593	1,050,670
1941-42 ..	122,128	312,663	(b) 60,000	196,765	234,446	28,706	..	9,783	964,491
1942-43 ..	95,060	184,795	24,749	135,116	162,776	24,618	..	379	627,493

(a) Excludes quantity used in top-dressing pasture lands. (b) Incomplete. See Note (a).  
(c) 1935-36.

As mentioned in § 18 the Commonwealth Government has encouraged the use of artificial fertilizers by subsidizing primary producers, other than wheat-growers, at the rate of 15s. per ton up to 1936-37 when the subsidy was reduced to 10s. per ton. The payment of this subsidy ceased on 30th June, 1939, but was re-introduced as from 1st July, 1941, at the rate of 25s. per ton. For the purpose of stabilizing the price of superphosphate during the year 1942-43, the Primary Producers Relief (Superphosphate) Act 1943 was passed. The Minister may after the receipt of a recommendation by the Superphosphate Industry Committee authorize the making of payments to manufacturers of superphosphate to cover increased costs of manufacture.



6. **Local Production.**—Complete information regarding local production of fertilizers is not available. The number of firms engaged in the manufacture of chemical fertilizers in Australia for the year 1942-43 was 34, made up as follows :—New South Wales, 6 ; Victoria, 6 ; Queensland, 5 ; South Australia, 6 ; Western Australia, 5 ; and Tasmania, 6. The production of superphosphate in Australia during 1942-43 amounted to 461,013 tons, the largest producing States being Victoria, Western Australia and South Australia.

## § 20. Ensilage.

1. **Government Assistance in Production.**—The various State Governments devote a considerable amount of attention to the education of the farming community in regard to the value of ensilage. Monetary aid is afforded in the erection of silos, and expert advice is supplied in connexion with the design of the silos and the cutting and packing of the ensilage.

2. **Quantity Made.**—Information regarding the number of holdings on which ensilage was made and the quantity made during the seasons 1938-39 to 1942-43 is given in the following table :—

ENSILAGE MADE.

State.	1938-39.		1939-40.		1940-41.		1941-42.		1942-43.	
	Holdings.	Ensilage Made.	Holdings.	Ensilage Made.	Holdings.	Ensilage Made.	Holdings.	Ensilage Made.	Holdings.	Ensilage Made.
	(a) No.	Tons.	(a) No.	Tons.	(a) No.	Tons.	(a) No.	Tons.	(b)	Tons.
New South Wales ..	1,476	124,496	1,743	173,220	1,546	138,407	820	64,145	(b)	71,801
Victoria ..	549	28,716	1,292	78,193	648	30,520	(b)	34,109	(b)	32,099
Queensland ..	291	17,772	307	18,238	522	26,084	350	27,370	(b)	20,825
South Australia ..	103	6,056	177	15,546	132	7,275	110	7,428	(b)	9,847
Western Australia ..	328	16,156	322	17,196	292	14,510	257	14,694	(b)	15,019
Tasmania ..	12	490	185	1,102	42	313	86	417	(b)	967
Australia ..	2,759	193,686	4,026	303,495	3,182	217,109	(b)	148,103	(b)	150,558

(a) Number of holdings on which ensilage was made.  
80 tons for Australian Capital Territory (one holding).  
Capital Territory.

(b) Not available. (c) Excludes  
(d) Excludes 473 tons for Australian

The drought of 1902-3 drew increased attention to the value of stocks of ensilage and during the four seasons ended 1909-10 there was an increase both in the number of holdings on which ensilage was made and in the quantity produced. The following five seasons, however, showed a falling off, but the reduction was due to the fact that stocks had not been drawn upon to any great extent during the previous seasons. The accumulated stocks proved of great value during the 1914 drought, though far below what would have been the case if more attention had been paid to production during the previous years, when there was a surplus of green fodder. The quantities made since that date have fluctuated considerably, but the output has increased during recent years. The production in 1942-43 was 151,031 tons and was 152,464 tons less than the 1939-40 production of 303,495 tons which was the greatest output recorded in any year.

## § 21. Agricultural Colleges and Experimental Farms.

1. **General.**—In most of the States agricultural colleges and experimental farms have been established with a view to the promotion of more scientific methods in agriculture, stock-breeding and dairying. In the colleges, and on some of the farms, provision is made for the accommodation of pupils to whom both practical and theoretical instruction is given by experts in various branches of agriculture. Analyses of soils and fertilizers are made, manures are tested, and elementary veterinary science, etc., are taught, while general experimental work is carried on with cereal and other crops, not merely for the purpose of showing that it is practicable to produce certain crops in a given place, but

to show also how it is possible to make farming pay in the locality. Opportunities are afforded for practice in general agricultural work, and instruction is given in the conservation of fodder; in cheese and butter making; in the management, breeding and preparation for the market of live stock; in the eradication of pests and weeds; and in carpentering, blacksmithing and other trades.

Expert lecturers visit the various agricultural and dairying centres, and there is a wide distribution of periodical agricultural gazettes and bulletins.

2. *Agricultural Colleges and Experimental Farms.*—The latest summary regarding agricultural colleges and experimental farms is in respect of the year 1939-40 and will be found in the *Production Bulletin* No. 34, Part II., issued by this Bureau.

## § 22. Employment in Agriculture.

Information relating to the number of persons employed is furnished annually by landholders of one acre and upwards. The particulars furnished refer to the owner, occupier or manager, those members of his family, and other employees who are permanently engaged throughout the year in the work of the farm. Casual labour, such as harvesters and fruit-pickers, is excluded. In the collection of statistics of this nature difficulty is experienced in correctly determining whether the duties of female employees are more domestic than rural, and on that account it is considered advisable to leave females out of the table. Details for 1942-43 are not available.

### MALES EMPLOYED IN AGRICULTURE.

Year.	N.S.W.	Victoria.	Q'land.(a)	S. Aust.	W. Aust.	Tasmania.	Total.
1935-36 ..	42,204	35,926	29,700	30,096	22,585	12,731	173,242
1936-37 ..	43,648	35,575	31,600	30,273	22,317	12,138	175,551
1937-38 ..	43,279	35,592	(b) 34,000	30,365	22,527	11,929	177,692
1938-39 ..	44,627	35,548	31,600	28,981	19,653	11,676	172,085
1939-40 ..	43,269	35,570	33,800	28,502	18,703	11,507	171,351
1940-41 ..	41,105	34,000	32,000	26,487	17,742	11,701	163,035
1941-42 ..	35,113	(c) 33,000	31,000	(c) 25,000	15,213	11,318	(c) 150,644

(a) Estimated from returns furnished by Queensland State Government Insurance Office.

(b) As recorded by State Statistician.

(c) Estimated.

Although the area of crops has expanded considerably during the past two decades there has been a decrease in the number employed in agriculture owing to the increasing use of machinery both in the cultivation of the soil and in the harvesting of the crops. For a number of years prior to the economic depression the value of machinery employed in agricultural pursuits steadily increased until it reached nearly £39 million in 1928-29. After 1929-30 machinery values declined each year to £30 million in 1934-35, but thereafter rose again to £41 million in 1940-41. Particulars for later years are not available.

## § 23. Number and Area of Rural Holdings.

1. *General.*—The statistical data included in the Chapters relating to Agriculture, Pastoral and Dairying are obtained at an annual census taken in each State under the direction of the State Statisticians. This census is taken as early as practicable after the conclusion of the main harvest and covers every holding within the boundaries of each State.

A holding in Australia has been defined by the States on a more or less uniform basis and discrepancies which exist are not of sufficient importance to vitiate any comparisons. For the purpose of these statistics, a holding may be defined as land of one acre or more in extent used in the production of agricultural produce, the raising of live stock or the products of live stock.

With the exception of Queensland, particulars of the number of holdings included in these censuses are available for all States over a series of years. It was not until 1938-39, however, that a complete tabulation became available for Queensland.

2. **Number and Area.**—The following table shows the number and area of the holdings by each State for the year 1942-43 and for previous years for which information is available.

### RURAL HOLDINGS : NUMBER AND AREA.

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australian Capital Territory.	Total.
NUMBER OF RURAL HOLDINGS.								
	No.	No.	No.	No.	No.	No.	No.	No.
1932-33 ..	74,778	75,392	(a)	30,724	22,066	11,335	(a)	(a)
1933-34 ..	74,981	75,386	(a)	30,986	22,639	11,731	(a)	(a)
1934-35 ..	75,800	74,473	(a)	31,123	22,874	11,754	186	(a)
1935-36 ..	75,631	73,772	(a)	31,262	22,652	11,857	202	(a)
1936-37 ..	76,239	72,845	(a)	31,321	21,763	11,735	202	(a)
1937-38 ..	75,923	72,792	(a)	31,277	21,682	11,680	202	(a)
1938-39 ..	75,365	72,452	41,503	31,280	21,052	11,680	204	253,536
1939-40 ..	74,909	72,557	42,076	31,244	20,807	11,575	204	253,372
1940-41 ..	74,495	72,382	42,410	30,961	20,347	11,583	203	252,381
1941-42 ..	73,973	72,027	42,500	30,565	20,395	11,500	208	251,168
1942-43 ..	73,579	71,489	42,748	27,934	18,351	11,532	209	245,842
TOTAL AREA OF RURAL HOLDINGS.								
	'000. acres.	'000. acres.	'000. acres.	'000. acres.	'000. acres.	'000. acres.	'000. acres.	'000. acres.
1932-33 ..	171,930	37,704	(a)	132,673	227,616	6,595	370	(a)
1933-34 ..	171,641	38,778	(a)	134,847	217,979	6,675	373	(a)
1934-35 ..	171,631	38,861	(a)	137,918	214,455	6,813	369	(a)
1935-36 ..	172,457	39,129	(a)	138,330	218,079	6,931	383	(a)
1936-37 ..	173,880	39,826	(a)	136,978	215,210	6,851	385	(a)
1937-38 ..	174,137	40,388	(a)	142,836	215,911	6,755	382	(a)
1938-39 ..	174,660	40,791	317,782	144,682	211,720	6,778	371	896,784
1939-40 ..	174,315	40,653	338,216	145,979	213,503	6,779	394	919,839
1940-41 ..	173,869	41,334	340,000 <sup>b</sup>	144,207	210,107	6,667	394	916,578
1941-42 ..	173,554	41,292	350,000 <sup>b</sup>	145,634	212,198	6,791	397	929,866
1942-43 ..	171,054	41,035	362,866	145,443	208,886	6,525	386	936,195

(a) Not available.

(b) Estimated.

3. **Analysis of Holdings.**—(a) *General.* It is not possible to classify these holdings according to the purpose for which they are used. This arises from a number of factors, the chief of which is mixed farming. The general trend in Australia is for farmers to diversify their activities and consequently it is very difficult to determine whether the purpose of many holdings is mainly agricultural, pastoral or dairying or any of these in combination.

(b) *New South Wales.* Such an analysis is made in New South Wales but as pointed out by the Statistician it should be regarded as an approximation. It is compiled from the description of purpose given by the occupier of the holding at the time of the Census. This tabulation reveals that there were 71,743 holdings so classified in New South Wales during 1940-41. Of this number, 9,938 described their main purpose as Agricultural only, 20,897 as Pastoral only, 14,098 Dairying only, 2,558 as Poultry, Pig or Bee Farming while the main purpose of the remaining 24,250 holdings were stated to be a combination of two or more of these activities. Holdings used mainly for residential or other purposes but which were used partly for the production of rural products have been omitted. These numbered 2,752 during 1940-41.



## CHAPTER XXIII.

### FARMYARD, DAIRY AND BEE PRODUCTS.

#### § 1. Introductory.

1. **General.**—The introduction of cattle into Australia and the early history of the dairying industry are referred to in some detail in earlier issues of this publication. It may here be noted that the original stock has been crossed with specially imported stud cattle, while further judicious crossings of strains have resulted in an increased and improved milk supply. In Australia, dairy cattle thrive in the open throughout the year, local climatic conditions demanding no protection other than tree plantations for shelter, and rugging in the coldest weather. Indigenous and imported grasses furnish food during the greater part of the year, and winter fodder, when necessary, is given to the cattle in the fields. With the wider application of scientific methods in the treatment of animals and pasturages and in the processes of manufacture, coupled with herd testing and effective State supervision, the dairying industry has shown rapid expansion. An investigation into the problems of the dairying industry was instituted by the Commonwealth Government in 1929, and the first report dealing with farm production was completed in 1930. It was proposed to issue additional reports, but the investigation was discontinued. Investigation by the British Medical Research Council into the vitamin content of Australian, New Zealand and British butter showed high and uniform results for the Australian product, the figures being on a par with those for the United Kingdom and other European countries. It was demonstrated also that Australian production and marketing methods do not adversely affect the vitamin content of the butter and that the loss during cold storage even for as long as two years is insignificant.

2. **Official Supervision of Industry.**—Dairy experts of the various State Agricultural Departments give instruction in approved methods of production, and inspect animals, buildings and marketable produce. A high standard of cleanliness, both of *personnel* and *materiel*, prevails. Financial assistance of a temporary nature is also given.

The export trade is regulated by the terms of the Commonwealth Commerce (Trade Descriptions) Act 1905–1933, and regulations thereunder. It will be sufficient to state here that the true trade description, etc., must be marked on all produce intended for export, while official inspection ensures the maintenance of purity and quality. Upon request of the exporter the goods are given a certificate by the inspector.

3. **Stabilization Schemes.**—(i) *Voluntary Plan.* During the period from January, 1926, to April, 1934, a voluntary scheme known as the "Paterson Plan" was in operation, and had the effect of stabilizing the price of butter in Australia. The scheme provided for the payment of a levy on all butter produced in Australia sufficient to pay a bounty on export which ranged from 3d. to 4½d. per lb. The local price was raised by the amount of the bounty per unit while the return to the producer on all butter produced was increased by approximately the difference between the rate of bounty paid and the rate of levy charged. The scheme, which continued until 25th April, 1934, did not receive the full support of all butter manufacturers.

(ii) *Compulsory Plan.* On 1st May, 1934, the "Paterson Plan" was superseded by a compulsory price equalization plan. The object of this scheme was to maintain local prices for butter and cheese independently of prices realized from exports. The Dairy Produce Act was passed by the Commonwealth Parliament towards the end of

1933, and at the same time complementary legislation was passed by the Parliaments of New South Wales, Victoria, Queensland and Tasmania. As a result of a referendum among producers held in 1936, Tasmania withdrew from the plan and the State Act expired. In the Commonwealth Act power was given to regulate interstate trade while the State Acts were designed to regulate trade within the respective States. The authority set up by each State Act fixed the proportion of the State's production to be sold within the State, and the Commonwealth Act protected this allocation by regulating the movement of butter and cheese from one State to another and so ensured the removal from the Australian market of the surplus production.

The compulsory plan was invalidated by the decision in 1936 of the Privy Council which declared in the James (Dried Fruits) Case that the Commonwealth had no power under the Constitution to regulate trade between the States.

(iii) *Equalization Scheme.* Since the Privy Council decision the butter price stabilization scheme has continued to operate by voluntary action based on the agreements between the manufacturers and the Commonwealth Dairy Produce Equalization Committee Limited. The Committee enters into agreements with manufacturers to secure to them equal rates from sales of dairy produce, and for this purpose may fix basic prices at which dairy produce sold in Australia or abroad is to be taken into account. The effect is that local and export trade are distributed in equitable proportions among the manufacturers by means of quotas. The Committee fixes basic prices and equalizes returns to factories through an Equalization Fund. The quotas are the same in all the States concerned in the scheme, which are New South Wales, Victoria, Queensland and Tasmania.

The Commonwealth Prices Commissioner has fixed the home consumption prices of butter and cheese.

4. *Mixed Farming.*—Dairying is not, as formerly, wholly confined to agriculturists, since many graziers in a large way of business also give it their attention. In non-coastal regions it is generally carried on in conjunction with agriculture and sheep-raising, sufficient fodder being grown to carry the cattle through the winter months. Local wants are thus met, and in many places remote from the metropolis well-equipped factories have been established. The extent to which dairy cows and pigs are run in conjunction with the growing of wheat is referred to in Chapter XXII. "Agricultural Production".

5. *Factory System.*—Cream separation and butter-making are often carried on together under the co-operative system. The creation of large central butter factories, supplied by numerous separating establishments or "creameries," has resulted in a considerable reduction in the cost of manufacture, since improved appliances such as refrigerators, etc., may be profitably worked at the larger establishments. The product is also of a more uniform quality and the number of farmers who prefer to convert the cream rather than send it to the factory is rapidly diminishing. Formerly the average quantity of milk used per pound of hand-made butter was about 3 gallons, but separator butter requires less than  $2\frac{1}{2}$  gallons.

6. *Butter and Cheese Factories.*—The factories in Australia for the manufacture of butter, cheese and condensed milk numbered 487 in 1942-43. They were distributed among the States as follows:—New South Wales, 118; Victoria, 159; Queensland, 101; South Australia, 48; Western Australia, 18; and Tasmania, 43. Fuller details regarding numbers of factories, output, etc., are given in Chapter XIX. "Manufacturing Industry".

7. *Ottawa Conference.*—Details of the agreement reached at the Imperial Economic Conference at Ottawa in August, 1932, regarding the dairying, bee and poultry industries are given in previous issues of the *Official Year Book*.

8. **Employment.**—In previous years the number of persons employed in the dairying industry was ascertained at the annual census of dairy production. The particulars collected were in respect of those persons who were permanently engaged in the actual work of the farm and included owner, occupier, or manager, members of the family and other permanent employees. Casual hands were excluded; so were females whose duties were mainly domestic, although they may have assisted in the outdoor work of the farm. Later details are not available in sufficient detail or from a sufficient number of States to present similar data to that shown hereunder.

## EMPLOYMENT IN DAIRYING INDUSTRY.

Year and Sex.		N.S.W.	Victoria.	Q'land. (a)	S. Aust.	W. Aust.	Tas.	Total.
		No.	No.	No.	No.	No.	No.	No.
1935-36	Males ..	38,150	42,072	27,000	4,500	5,465	3,539	120,726
	Females ..	6,481	7,790	7,000	2,756	1,249	2,462	27,738
1936-37	Males ..	37,450	41,922	28,600	4,578	5,261	3,332	121,143
	Females ..	5,444	7,666	7,000	2,331	1,143	2,234	25,818
1937-38	Males ..	35,940	41,878	(b) 29,000	4,540	5,495	3,634	120,187
	Females ..	6,027	7,406	(b) 7,000	2,779	1,129	2,146	26,487
1938-39	Males ..	35,860	41,829	27,000	4,436	6,365	3,917	119,407
	Females ..	6,505	7,222	7,000	2,812	1,661	2,200	27,400
1939-40	Males ..	35,915	41,854	28,800	4,757	6,362	3,670	121,358
	Females ..	7,130	7,314	7,000	2,418	1,678	2,064	27,604

(a) Estimated from returns of Queensland State Government Insurance Office. (b) As recorded by Government Statistician.

The number of dairy cows shown in the table below together with other details gives some indication of activity in the dairying industry since 1918-19 :—

## DAIRYING INDUSTRY : AUSTRALIA.

Year.	Number of Dairy Cows.	Production of Butter.	Production of Cheese.	Value of Machinery employed on Dairy Farms.	Number of Males engaged.
	No.	lb.	lb.	£	No.
1918-19 ..	1,901,000	181,802,675	23,790,240	1,325,502	68,100
1928-29 ..	2,466,000	290,790,190	30,217,101	3,437,000	82,300
1938-39 ..	3,353,825	455,834,329	65,645,989	5,659,000	119,400
1939-40 ..	3,420,476	474,852,474	69,784,243	6,421,000	121,400
1942-43 ..	3,246,855	383,570,979	80,929,760	(a)	(a)

(a) Not available.

## § 2. Dairy Cattle and Dairy Products.

1. **Dairy Herds.**—The dairy herds of Australia were severely depleted during the drought of 1914-15, when the number was reduced to 1,684,393. Following that year there has been a steady expansion in the number of dairy cattle until in 1943 the number exceeded 3.2 million. In New South Wales, Victoria, South Australia and Tasmania the proportion of dairy cattle to all cattle is high. In Queensland, the Northern Territory and Western Australia there is a greatly preponderating number of other cattle, the main object in these areas being the production of beef. Dairying, however, has developed greatly in Southern Queensland since 1914-15, and the largest contribution to the Australian increase previously mentioned has been made by this State. The number of dairy cows shown in the following table refer to those recorded by farmers as being in milk and dry as at 31st March, 1943. The figures shown for the earlier years cover the same categories, but the period differs in some States. To this extent the figures lack comparability which is indicated in footnotes (b) and (c).



## NUMBER OF CATTLE AND DAIRY COWS (IN MILK AND DRY).(a)

State.		Beginning of Year.(b)				31st March, 1943.
		1939.	1940.	1941.	1942.(c)	
New South Wales	{ All Cattle ..	2,811,884	2,762,653	2,769,061	2,878,450	3,030,546
	{ Dairy Cows ..	985,251	980,279	958,402	944,912	926,599
Victoria	{ All Cattle ..	1,697,295	1,787,597	1,922,336	1,986,544	2,023,892
	{ Dairy Cows ..	859,811	863,073	904,915	900,408	877,164
Queensland	{ All Cattle ..	6,097,089	6,198,798	6,210,810	6,303,467	6,466,316
	{ Dairy Cows ..	997,123	1,024,735	1,002,678	1,020,000	1,035,260
South Australia	{ All Cattle ..	318,897	351,013	376,654	399,143	424,253
	{ Dairy Cows ..	152,690	156,347	163,219	162,404	157,297
Western Australia	{ All Cattle ..	767,680	799,175	788,928	839,731	831,231
	{ Dairy Cows ..	119,814	121,852	124,370	128,664	129,763
Tasmania	{ All Cattle ..	262,407	252,484	259,108	253,106	241,681
	{ Dairy Cows ..	93,816	91,417	93,810	89,345	80,559
Northern Territory	{ All Cattle ..	899,472	922,581	922,308	892,881	978,434
	{ Dairy Cows ..	(d)	(d)	(d)	(d)	(d)
Australian Capital Territory	{ All Cattle ..	7,057	5,879	6,636	7,432	6,967
	{ Dairy Cows ..	1,005	1,030	1,097	1,122	1,114
Australia	{ All Cattle ..	12,861,781	13,080,180	13,255,841	13,560,754	14,005,320
	{ Dairy Cows ..	3,209,519	3,238,733	3,248,500	3,246,855	3,207,756

(a) Excludes cows (milking and dry) in New South Wales not in Registered Dairies. (b) As at 31st March for New South Wales; 1st March for Victoria; 1st January for Queensland, South Australia, Western Australia and Tasmania. (c) As shown in footnote (b) except as follows:—30th June, Queensland; and 31st March, Tasmania. (d) Not available.

2. Milk.—The annual quantity of milk produced per dairy cow varies greatly with breed, locality and season, reaching as high as 1,000 gallons, but averaging for the whole of Australia for all dairy cows and for all seasons prior to 1916 considerably under 300 gallons per annum. In recent years not only has there been an improvement in the quality of the cattle, but the application of scientific methods is being continually extended, and the 300-gallon average has been exceeded in each year since 1924, the yield of 392 gallons in 1931 constituting a record. The average annual yields per cow given in the following table for the last five years are based on the number of dairy cows which were in milk during any part of the year. The average given is, therefore, below that for cows which were yielding during the greater part of the year. It should be noted that there are many difficulties attending the collection of the total quantity of milk obtained during any year. In addition, there is the further difficulty of ascertaining with any degree of accuracy the average number of cows in milk during the same period. The average yield per cow shown hereunder may be accepted as sufficiently reliable to show the general trend:—

## MILK PRODUCTION.

Heading.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia. (b)
1938-39—								
Dairy Cows (a) .. No.	994,155	889,719	961,674	152,686	119,183	93,154	1,041	3,211,612
Production '000 gal.	311,384	377,882	347,336	72,521	45,562	34,140	350	1,189,175
Aver. per cow .. gal.	313	425	361	475	382	366	336	370
1939-40—								
Dairy Cows (a) .. No.	982,765	861,442	1,010,929	154,523	120,833	92,617	1,017	3,224,126
Production '000 gal.	314,709	456,918	325,342	77,316	44,744	34,583	388	1,254,000
Aver. per cow .. gal.	320	533	322	500	370	373	382	390
1940-41—								
Dairy Cows (a) .. No.	969,341	883,994	1,013,706	159,783	123,111	92,618	1,064	3,243,617
Production '000 gal.	308,048	447,874	279,267	78,762	44,801	31,078	444	1,190,274
Aver. per cow .. gal.	318	501	276	493	364	336	417	367
1941-42—								
Dairy Cows (a) .. No.	951,657	902,662	1,011,339	162,812	126,517	91,582	1,109	3,247,678
Production '000 gal.	279,975	428,691	237,635	78,918	49,050	30,196	405	1,104,870
Aver. per cow .. gal.	294	475	235	485	388	330	365	340
1942-43—								
Dairy Cows (a) .. No.	935,756	888,786	1,027,630	159,850	129,213	84,952	1,118	3,227,305
Production '000 gal.	303,502	381,640	289,808	78,563	46,346	29,371	400	1,129,630
Aver. per cow .. gal.	324	429	282	491	359	309	358	350

(a) Mean for the year.

(b) Excludes Northern Territory.

3. **Butter and Cheese.**—The quantity of butter and cheese produced in Australia depends upon seasonal conditions. There had been a steady increase in the annual output of butter for many years prior to the war when the average annual production rose from 270 million lb. for the quinquennium 1924 to 1928 to 438 million lb. for the five years ended 1939-40. The output of 475 million lb. in 1930-40 was a record for butter production. In 1940-41, due to adverse seasonal conditions, the production was slightly below the average for the previous five years.

The production during the next two years declined considerably, due partly to the drain on man-power for the defence services and in part to the conversion of some butter factories to cheese-making. In 1941-42 the production fell to over 20 per cent. below that of 1939-40, and was the lowest during the past ten years, while the figure for 1942-43 increased slightly over that for the previous year.

The production of cheese in 1939-40 was 69,784,000 lb. exceeding the previous record by 4 million lb. reached in 1938-39. Due to an adverse season the production in 1940-41 fell to 60,004,000 lb. When the United Kingdom authorities in 1941 desired greatly increased supplies of cheese the Dairy Produce Control Committee decided to convert some butter-making factories over to cheese-making. The production of cheese rose in 1941-42 to 67,520,000 lb. and in 1942-43 increased to nearly 81 million lb. which exceeded by 11 million lb. the previous record output of 1939-40. The States contributing to the high production in 1942-43 were :—Queensland 28,537,000 ; Victoria 25,266,000 ; and South Australia 17,918,000 lb.

The production of butter and cheese for the five years ended 1942-43 was as follows :—

**BUTTER AND CHEESE PRODUCTION.**

State.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
<b>BUTTER.</b>					
	lb.	lb.	lb.	lb.	lb.
New South Wales .. ..	118,820,717	116,813,692	108,563,400	89,222,529	98,275,379
Victoria .. ..	130,573,913	164,826,094	156,345,602	140,816,692	125,674,673
Queensland .. ..	157,625,746	142,846,421	119,939,865	97,622,810	113,211,198
South Australia .. ..	20,716,584	22,938,381	21,379,639	20,456,603	20,564,145
Western Australia .. ..	16,244,449	15,551,189	15,237,737	17,053,027	15,740,108
Tasmania .. ..	11,835,500	11,861,190	10,595,122	10,307,763	10,091,476
Australian Capital Territory ..	17,415	15,507	21,557	14,571	14,000
<b>Australia .. ..</b>	<b>455,834,329</b>	<b>474,852,474</b>	<b>432,082,922</b>	<b>375,493,995</b>	<b>383,570,979</b>
<b>CHEESE.</b>					
	lb.	lb.	lb.	lb.	lb.
New South Wales .. ..	7,485,907	6,803,510	6,470,136	5,261,851	5,265,038
Victoria .. ..	19,554,061	24,495,121	18,376,904	22,518,272	25,266,045
Queensland .. ..	15,768,543	13,848,936	11,733,147	16,359,872	28,536,876
South Australia .. ..	18,457,598	20,550,047	19,427,828	18,903,451	17,917,631
Western Australia .. ..	980,254	846,301	960,197	1,311,849	1,632,228
Tasmania .. ..	3,399,626	3,240,328	3,036,228	3,164,631	2,311,942
<b>Australia .. ..</b>	<b>65,645,989</b>	<b>69,784,243</b>	<b>60,004,440</b>	<b>67,519,926</b>	<b>80,929,760</b>

4. **Condensed or Concentrated Milk.**—The manufacture of this product has increased enormously since 1935-36, the production increasing annually until in 1941-42 the output reached 170 million lb. The greatest development occurred in Victoria, increasing during this period from 39 million lb. to 119 million lb. A slight decline was recorded in all States during 1942-43. The output for the years 1938-39 to 1942-43 was as follows :—

**PRODUCTION OF CONDENSED, CONCENTRATED AND POWDERED MILK, ETC.**

State.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	lb.	lb.	lb.	lb.	lb.
New South Wales .. ..	11,204,574	15,708,917	26,714,311	37,769,089	34,870,506
Victoria .. ..	52,475,320	67,093,385	81,114,033	119,162,917	109,746,110
Other States (a) .. ..	8,600,558	8,306,041	14,456,699	13,482,670	12,639,360
<b>Total .. ..</b>	<b>72,280,452</b>	<b>91,108,343</b>	<b>122,285,043</b>	<b>170,414,676</b>	<b>157,255,976</b>

(a) Separate details not available for publication.

5. **War-time Contract—Butter and Cheese.**—At the outbreak of war in September, 1939, contracts were negotiated between the Governments of the Commonwealth and the United Kingdom whereby the latter undertook to purchase from Australia at prices fixed according to grade 75,500 tons of butter and 13,000 tons of cheese for the period ending June, 1940. The contracts were further extended each year to June, 1944. Under the 1942 contract, the quantity of butter was reduced and the grades were restricted but the quantity of cheese was increased. Further details regarding quantities required and prices paid may be found in Chapter XXVII. "Miscellaneous".

6. **Oversea Trade in Butter, Cheese and Milk.**—The production of butter and cheese in Australia is considerably in excess of local requirements and consequently a substantial surplus is available in normal times for export overseas. The extent of this surplus is chiefly dependent upon the seasonal conditions. In pre-war years the quantity of butter and cheese consumed annually in Australia was about 230 million lb. and 30 million lb., respectively, and production in excess of these amounts may be regarded as surplus for export.

Because of the abnormal increase in home consumption since early in 1942 when considerable numbers of Allied servicemen came to the South-West Pacific Area exports to the United Kingdom since then have been reduced to a lower level than for previous years. During 1942-43, 110 million lb. or 89 per cent. of all butter exported was shipped to the United Kingdom and 15 million lb. or 51 per cent. of cheese exported was consigned to that country, representing a considerable reduction from 1938-39 when butter exports to the United Kingdom totalled 217 million lb., being 95 per cent. of all butter exported, and cheese almost 35 million lb., being 97 per cent. of all cheese exported.

All butter and cheese exported comes under the provisions of the Exports (Dairy Produce) Regulations and is subject to the supervision, inspection and examination by officers appointed for that purpose. These commodities are graded according to quality which has been fixed by Regulation as follows:—Flavour and aroma, 50 points; texture, 30 points; and condition, 20 points. Butter and cheese graded at 93 to 100 points is of choicest quality; at 90 to 92 points, first quality; at 86 to 89 points, second quality; and at 80 to 85 points, pastry or cooking quality or, in the case of cheese, third quality.

In the following table particulars are given of the relative proportions of butter and cheese graded for export according to quality. Fuller details, which include actual quantities by States, are to be found in *Production Bulletin* No. 36, Part II.

#### BULK BUTTER AND CHEESE, GRADED FOR EXPORT: AUSTRALIA.

Grade	Butter.			Cheese.		
	1940-41.	1941-42.	1942-43.	1940-41.	1941-42.	1942-43.
	%	%	%	%	%	%
Choicest ..	51.74	50.75	54.78	15.42	5.32	3.88
First Quality ..	35.72	41.91	39.01	52.04	67.14	58.81
Second Quality ..	10.76	6.48	5.52	32.54	27.54	37.31
Third Quality ..	1.78	0.86	0.69	(a)	(a)	(a)
Total ..	100.00	100.00	100.00	100.00	100.00	100.00

(a) Included with Second Quality.



The following tables give the imports, exports and net exports of butter, cheese and condensed milk. There was a substantial decrease in the net exports of butter and cheese during the years 1940-41, 1941-42, and 1942-43, and a marked increase in the net exports of milk during those years :—

### BUTTER, CHEESE, AND MILK : IMPORTS AND EXPORTS. AUSTRALIA.

Products.				1938-39.	1939-40.	1940-41.	1941-42.	1942-43.	
IMPORTS.									
Butter	..	..	..	lb.	3,425	4,646	82	191,549	8,683
"	..	..	..	£A.	286	436	10	18,904	967
Cheese	..	..	..	lb.	156,188	83,598	19,645	139,695	509,580
"	..	..	..	£A.	11,551	8,022	1,727	10,630	28,686
Milk—concentrated and preserved	..	..	..	lb.	44,135	155,093	38,149	573,671	296,545
"	..	..	..	£A.	1,048	3,768	1,199	22,891	8,143
EXPORTS.									
Butter	..	..	..	lb.	229,542,779	262,319,057	195,708,596	130,347,196	124,320,720
"	..	..	..	£A.	12,891,837	15,894,718	11,973,485	8,124,975	8,085,660
Cheese	..	..	..	lb.	35,924,467	43,055,779	33,907,833	31,457,408	25,964,332
"	..	..	..	£A.	1,074,008	1,440,140	1,543,909	1,428,118	1,225,184
Milk—concentrated and preserved	..	..	..	lb.	19,106,953	32,219,408	56,315,000	75,650,451	59,135,863
"	..	..	..	£A.	791,100	1,126,066	1,528,951	2,059,724	1,858,137
NET EXPORTS.									
Butter	..	..	..	lb.	229,539,354	262,314,411	195,708,514	130,155,647	124,312,037
"	..	..	..	£A.	12,891,551	15,894,282	11,973,475	8,106,071	8,084,693
Cheese	..	..	..	lb.	35,768,279	42,972,181	33,888,188	31,317,713	25,454,752
"	..	..	..	£A.	1,062,457	1,432,118	1,542,182	1,417,488	1,196,498
Milk—concentrated and preserved	..	..	..	lb.	19,062,818	32,064,315	56,276,851	75,076,780	58,839,318
"	..	..	..	£A.	790,052	1,122,298	1,527,752	2,036,833	1,849,994

7. Local Consumption of Butter and Cheese.—The local production of butter and cheese, minus the net export or plus the net import for the corresponding period, represents approximately the quantity available for consumption in Australia. The figures for each of the five years ended 1942-43 are as follows :—

### BUTTER AND CHEESE : LOCAL CONSUMPTION.

Products.		1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
		lb.	lb.	lb.	lb.	lb.
Butter—Total	..	226,294,975	211,547,840	235,547,200	244,063,680	250,846,400
Per head of population	..	32.67	30.24	33.32	(a)	(a)
Cheese—Total	..	29,877,710	26,812,062	25,878,720	35,947,520	53,305,600
Per head of population	..	4.31	3.83	3.66	(a)	(a)

(a) As large numbers of Allied servicemen were drawing on our supplies no consumption per head of population is available.

Consumption in 1938-39 averaged 32.67 lb. of butter and 4.31 lb. of cheese per head while the consumption of butter in the United Kingdom, Canada and New Zealand was 24.8 lb., 32.7 lb., and 40.7 lb. per head per annum respectively, and that of cheese amounted to 8.6 lb., 3.5 lb., and 8 lb. respectively. Later details are not available.

## § 3. Pigs and Pig Products.

1. Pigs.—The number of pigs in Australia has varied considerably since the commencement of the present century. In 1904, the total amounted to 1,062,703, but after a period of fluctuations it declined to 605,968 in 1919. In 1921 the number increased to 960,000 and from that year it remained fairly constant up to 1928. Since that year more than 1,000,000 pigs have been recorded annually in Australia with the maximum figure of 1,563,000 at 31st March, 1943. The distribution of pigs among the States and Territories in 1943 was—New South Wales, 486,960; Victoria, 307,929; Queensland, 409,348; South Australia, 156,243; Western Australia, 151,958; Tasmania, 49,258; Northern Territory, 532; Australian Capital Territory, 779; total, 1,563,000.

A more accurate index of the development of pig-raising in Australia is provided in the following table which combines the number of slaughtering with the number returned each year from 1933. The table discloses substantial increases in the number of pigs raised over the period under review :—

#### NUMBER OF PIGS AND NUMBER SLAUGHTERED : AUSTRALIA.

Year.			Number of Pigs.	Number Slaughtered.	Year.			Number of Pigs.	Number Slaughtered.
1933	..	..	1,046,867	1,636,974	1938	..	..	1,155,591	1,839,597
1934	..	..	1,158,274	1,763,332	1939	..	..	1,455,341	1,952,552
1935	..	..	1,293,964	1,983,745	1940	..	..	1,797,340	2,350,358
1936	..	..	1,202,752	2,073,909	1941	..	..	1,477,303	2,593,927
1937	..	..	1,100,082	1,897,430	1942	..	..	1,563,000	2,082,903

2. **Consumption, Pork and Bacon and Ham.**—Particulars available regarding the consumption of pork, as such, in pre-war years give an average for Australia of between 6½ and 7½ lb. per head of population. The per capita consumption of bacon and ham remained constant at about 10½ lb. Exports increased considerably in 1939-40 and a further upward movement occurred in 1940-41. In the following years, however, exports dropped to a low level in view of additional home demand owing to the presence of large numbers of Allied servicemen in the South-West Pacific Area. The average normal consumption of pork and bacon and ham per head of the Australian population is about 17 lb. compared with 22 lb. in New Zealand, 57 lb. in Canada, and 64 lb. in the United States of America. Figures for Australia for each of these commodities during the last five years are as follows :—

#### PORK AND BACON, ETC. : LOCAL CONSUMPTION.

Product.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	lb.	lb.	lb.	lb.	lb.
Pork—					
Quantity .. ..	52,169,753	45,353,242	38,374,764	95,951,541	91,418,880
Per head of population	7.53	6.48	5.43	(a)	(a)
Bacon and Ham—					
Quantity .. ..	72,352,774	73,759,675	82,034,871	89,378,240	83,144,320
Per head of population	10.44	10.55	11.61	(a)	(a)

(a) As large numbers of Allied servicemen were drawing on home supplies no consumption per head is available.

3. **War-time Contract.**—A contract for the sale of the surplus production of Australian pig meats was concluded between the Governments of the Commonwealth and the United Kingdom for the year ended 30th September, 1940. Due to changed conditions after the year 1941, arrangements were made to take the surplus meats in canned form. Fuller details will be found in Chapter XXVII. "Miscellaneous".

4. **Bacon and Ham.**—The production for the years 1940-41 to 1942-43 has increased steadily, the amounts of bacon and ham produced in those years were :—1940-41, 89,373,119 lb.; 1941-42, 95,118,727 lb.; 1942-43, 104,835,525 lb. The State distribution for the year 1942-43 when production was the highest ever recorded was as follows :—New South Wales, 33,783,887 lb.; Victoria, 19,834,343 lb.; Queensland, 29,247,891 lb.; South Australia, 9,919,663 lb.; Western Australia, 9,277,295 lb.; Tasmania, 2,772,446 lb. A large proportion of the bacon and ham produced is consumed locally. On the experience of the last five years the local consumption was slightly more than 71,000,000 lb. per year, or about 10½ lb. per head of population. The bacon and ham exported from Australia is consigned chiefly to the Pacific Islands, India and the Middle East.

5. Oversea Trade in Pig Products.—The oversea trade in pigs and pig products for the five years ended 1942-43 is shown in the following table:—

**PIG PRODUCTS : OVERSEA TRADE, AUSTRALIA.**

Particulars.			1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
<b>Pigs.</b>							
Imports..	No.		28	12	5	9	I
"	£A.		1,007	413	183	54	71
Exports..	No.		69	54	208	28	..
"	£A.		621	387	883	272	..
Net Exports	No.		41	42	203	19	— I
"	£A.		—386	—26	700	218	—71
<b>BACON AND HAM.</b>							
Imports..	lb.		9,681	737	428	185,652	549
"	£A.		597	81	31	13,027	50
Exports..	lb.		1,739,053	4,247,554	6,676,900	5,764,260	6,043,208
"	£A.		119,994	274,932	439,655	395,031	404,290
Net Exports	lb.		1,729,372	4,240,817	6,676,472	5,578,608	6,042,659
"	£A.		119,397	274,851	439,624	382,004	404,240
<b>LARD.(b)</b>							
Imports..	lb.		106,821	97,499	2,176	6,634	6,884
"	£A.		3,065	2,737	88	229	844
Exports..	lb.		5,490,959	14,324,614	15,652,900	7,812,207	5,143,127
"	£A.		67,744	182,564	196,857	131,020	107,782
Net Exports	lb.		5,384,138	14,227,115	15,650,724	7,805,573	5,136,243
"	£A.		64,679	179,827	196,769	130,791	106,938
<b>FROZEN PORK.</b>							
Imports..	lb.		31,805	..	1,120	81,518	375
"	£A.		1,770	..	11	4,240	20
Exports..	lb.		30,716,417	52,202,821	74,889,552	34,240,367	1,997,030
"	£A.		882,117	1,561,432	2,302,656	1,107,029	85,885
Net Exports	lb.		30,684,612	52,202,821	74,888,432	34,158,849	1,996,655
"	£A.		880,347	1,561,432	2,302,645	1,103,689	85,865

(a) Including amount of 3,404,568 lb. exported as tinned bacon.

(b) Includes Lard Oil, and Refined Animal Fats.

NOTE.—The minus sign (—) signifies net imports.

Hitherto the output of pig products in Australia was usually sufficient to meet local requirements and provide a small surplus for export. During the five years ended 1939-40, however, oversea exports of frozen pork showed a remarkable increase averaging 33,450,000 lb. as compared with an average of 373,000 lb. for the five years ended 1930-31. In 1940-41 exports of pork reached the high level of nearly 75,000,000 lb. but dropped in 1941-42 to about the pre-war level. Exports during 1942-43 decreased to almost negligible quantities, owing to increased home consumption as a result of large numbers of Allied servicemen drawing on supplies from Australia. On the other hand exports of bacon and ham (including tinned bacon) rose to a level unprecedented in pre-war years.

The agreement at the Ottawa Conference regarding the regulation of supplies from foreign countries and the Dominions and its substitution by a Bacon Marketing Scheme by the British Government is referred to in detail in previous issues of the Official Year Book. At the outbreak of war in September, 1939, these arrangements were superseded by the war-time contract referred to in par. 3 above. The loss of supplies from Denmark and other European countries owing to war provided an opportunity for the expansion of the industry in Australia. Plans for this development are now being put into operation and the future of pig products for some years seems assured.



## § 4. Total Dairy Production.

The dairy production for each State in 1942-43 is shown below :—

## DAIRY PRODUCTION, 1942-43.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Total.
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## MILK.

Used for—	'000 gal.	'000 gal.	'000 gal.	'000 gal.	'000 gal.	'000 gal.	'000 gal.	'000 gal.
Butter ..	(a)203,451	266,849	(b)230,348	41,452	32,123	21,117	(c) 50	795,390
Cheese ..	5,353	25,687	27,260	17,142	1,538	2,341	..	79,321
Condensing and concentrating purposes ..	14,755	(e)37,104	..	(c)	(c)	..	..	(d)55,017
Other purposes ..	79,943	(e)52,000	(e)32,200	(f)19,969	(f)12,685	5,913	(e)350	199,902
Total ..	303,502	381,640	289,808	78,563	46,346	29,371	(e) 400	1,129,630

## BUTTER.

	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.
In Factories ..	(g)93,775	122,775	(h)111,511	18,064	14,440	7,592	..	368,157
On Dairy Farms (e)	4,500	2,900	1,700	2,500	1,300	2,500	14	15,414
Total ..	98,275	125,675	113,211	20,564	15,740	10,092	14	383,571

## CHEESE.

	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.
In Factories ..	5,146	25,236	(i)28,515	17,918	1,620	2,162	..	80,597
On Dairy Farms (e)	119	30	22	..	12	150	..	333
Total ..	5,265	25,266	28,537	17,918	1,632	2,312	..	80,930

## CONDENSED, CONCENTRATED AND POWDERED MILK.

	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.
In Factories ..	23,552	73,928	(e)	(e)	(e)	..	..	(d)157,256

## BACON AND HAM.

	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.
In Factories ..	33,299	19,334	29,162	9,246	9,197	2,473	..	102,711
On Dairy Farms ..	485	500	86	674	80	300	..	2,125
Total ..	33,784	19,834	29,248	9,920	9,277	2,773	..	104,836

(a) Includes 4,468,000 gallons of milk the produce of New South Wales sent as cream to Victoria and Queensland. (b) Includes 712,000 gallons of milk the produce of Queensland sent as cream to New South Wales. (c) Not available for publication. (d) Includes particulars of States marked (c). (e) Estimated. (f) Includes milk used in the production of condensed, concentrated and powdered milk, etc. (g) Includes 741,000 lb. of butter made from cream the produce of Victoria and Queensland. (h) Includes 351,000 lb. of butter made from cream the produce of New South Wales. (i) Includes 2,027,000 lb. of cheese made in factories not classified as such.

# § 5. Value of Dairy Production.

1. Value of Production—Gross and Net.—(i) *General.* The values of dairy production on a gross, local and net basis are shown in the following table. The presentation of these values has become possible by the adoption in the several States of uniform principles in determining production and marketing costs. Production values for this and other industries are dealt with more fully in Chapter XXVII. "Miscellaneous".

## GROSS, LOCAL AND NET VALUE OF DAIRY PRODUCTION, 1942-43.

State.	Gross Production valued at Principal Markets.	Marketing Costs.	Gross Production valued at Farm.	Farm Costs.		Net Value of Production. (a)	Depreciation (estimated).
				Fodder fed to Farm Stock.	Value of Other Materials used in process of Production.		
	£	£	£	£	£	£	£
New South Wales ..	17,905,000	1,875,000	16,030,000	2,192,000	(b) 13,000	13,825,000	(c)
Victoria ..	15,351,192	629,182	14,722,010	1,809,103	447,000	12,465,847	25,000
Queensland ..	12,731,000	330,000	12,401,000	1,440,000	290,000	10,671,000	130,000
South Australia ..	3,816,917	121,287	3,695,630	598,565	135,467	2,961,598	15,027
Western Australia ..	2,741,133	126,186	2,614,947	678,872	218,061	1,718,014	16,250
Tasmania ..	1,166,590	46,520	1,120,070	499,400	18,210	602,460	10,390
Total ..	53,711,832	3,128,175	50,583,657	7,218,000	1,121,738	42,243,919	(d) 196,667

(a) No deduction has been made for depreciation and maintenance for costs of power, power kerosene, petrol and other oils.

(b) No allowances made (d) Incomplete.

(ii) *States 1933-34 to 1942-43.* In the following table the net value of dairy production and the net value per head of population are given by States for each year since 1933-34.

## NET VALUE OF DAIRY PRODUCTION.

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
NET VALUE. (a).							
	£	£	£	£	£	£	£
1933-34 ..	8,011,000	6,232,393	4,626,681	1,138,928	369,050	384,200	20,762,252
1934-35 ..	8,844,000	7,531,415	5,798,796	1,121,089	619,810	445,130	24,360,240
1935-36 ..	9,195,000	9,344,742	5,869,000	1,393,141	505,101	540,600	26,847,884
1936-37 ..	9,128,000	10,778,186	4,957,000	1,587,796	554,010	542,070	27,547,062
1937-38 ..	10,181,000	10,495,005	7,443,000	1,891,356	825,354	753,620	31,589,335
1938-39 ..	10,446,000	9,958,474	9,878,000	1,942,994	893,428	662,860	33,781,756
1939-40 ..	10,887,000	12,332,822	9,799,000	2,194,167	905,372	724,850	36,843,211
1940-41 ..	10,740,000	13,080,352	8,417,000	2,101,945	898,181	468,940	35,706,418
1941-42 ..	10,455,000	12,601,657	7,413,000	2,138,139	1,173,362	562,390	34,343,548
1942-43 ..	13,825,000	12,465,847	10,671,000	2,961,598	1,718,014	602,460	42,243,919

## NET VALUE PER HEAD OF MEAN POPULATION.

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1933-34 ..	3 1 3	3 8 4	4 17 4	1 19 1	0 16 9	1 13 7	3 2 5
1934-35 ..	3 7 2	4 2 0	6 0 9	1 18 5	1 18 0	1 18 10	3 12 8
1935-36 ..	3 9 3	5 1 4	6 0 9	2 7 6	1 2 7	2 7 0	3 19 7
1936-37 ..	3 8 1	5 16 5	5 0 9	2 14 0	1 4 6	2 6 8	4 1 0
1937-38 ..	3 15 2	5 12 10	7 9 7	3 4 0	1 16 1	3 4 1	4 12 0
1938-39 ..	3 16 5	5 6 3	9 16 3	3 5 5	1 18 8	2 16 0	4 17 6
1939-40 ..	3 18 10	6 10 6	9 12 1	3 13 4	1 18 8	3 0 7	5 5 4
1940-41 ..	3 17 2	6 16 3	8 3 1	3 10 1	1 18 0	1 19 0	5 1 1
1941-42 ..	3 14 7	6 9 0	7 2 10	3 10 5	2 10 1	2 6 11	4 16 3
1942-43 ..	4 17 8	6 6 6	10 4 8	4 16 8	3 11 7	2 9 11	5 17 4

(a) No deduction has been made for depreciation and maintenance.

## § 6. Poultry-Farming.

1. **General.**—Whereas in earlier years poultry-raising was carried on as an adjunct to small mixed farming there has been a gradual transition to the present day when the industry has become highly specialized and distinct. Poultry farms have been established by the State Departments of Agriculture for purposes of scientific breeding and experts have been appointed to advise and instruct in the care and management of the poultry. Exhibitions of leading breeds in pre-war years were a regular feature of Agricultural Shows. Egg-laying competitions were conducted throughout most large districts. Many areas have instituted co-operative egg-collecting schemes and local butter factories have assisted by making arrangements for transport to market in conjunction with milk and cream deliveries to factory.

2. **Principal Kinds of Poultry.**—In pre-war years a classification of the principal kinds of poultry was a normal feature of the annual census of live-stock in all States except Victoria and Tasmania. For the former State the only complete figures related to a census taken at 30th June, 1933, while in Tasmania figures available were approximations only. With the collection of special war-time emergency returns from farmers in 1943, particulars are available from all States, but in most cases they relate to holdings producing eggs for sale only and therefore are not on a comparable basis with that of previous years. No details are available for the year 1941-42.

## POULTRY : NUMBER OF PRINCIPAL KINDS.

State.	Fowls.	Ducks.	Geese.	Turkeys.
1940-41.				
New South Wales(a) ..	No. 5,819,448	No. 183,380	No. 21,227	No. 199,730
Victoria(b) ..	5,496,969	292,882	30,283	113,966
Queensland ..	1,375,374	45,260	4,560	16,923
South Australia ..	2,071,866	50,407	14,560	40,430
Western Australia ..	1,359,994	34,014	1,866	30,480
Tasmania ..	450,000	35,000	10,000	10,000
Total ..	16,573,651	640,943	91,511	417,529

(a) Includes Australian Capital Territory.

(b) 1933-34.

31st MARCH, 1943. (See letterpress.)

New South Wales(a) ..	No. 4,384,652	No. 52,347	No. 4,710	No. 34,870
Victoria ..	2,548,154	71,274	9,202	35,195
Queensland(b) ..	1,769,540	44,146	7,516	18,827
South Australia ..	1,388,446	26,963	9,445	31,320
Western Australia ..	928,869	20,545	2,107	18,145
Tasmania ..	147,705	5,128	3,436	4,093
A.C.T. ..	11,321	552	25	99
Total ..	11,178,687	220,955	36,441	142,549

(a) Excludes 1,939,733 Fowls and Chickens, 97,359 Ducks, 123,122 Turkeys and 15,770 Geese on holdings not producing for sale.

(b) Includes Poultry on all holdings.



3. Value of Poultry Products—Gross and Net.—(i) *General.* Difficulty is experienced in obtaining complete figures for the production of poultry products. The following table sets out the values accruing to the poultry industry for Australia on a gross, local and net basis, and has been compiled from data actually collected or carefully estimated by the State Statisticians:—

### GROSS, LOCAL AND NET VALUE OF POULTRY PRODUCTS, 1942-43.

State.	Gross Production valued at Principal Markets.	Marketing Costs.	Gross Production valued at Farm.	Feed and Other Costs.	Net Value of Production. (a)
	£	£	£	£	£
New South Wales ..	5,931,000	570,000	5,361,000	1,969,000	3,392,000
Victoria ..	7,322,154	549,158	6,772,996	1,535,079	5,237,917
Queensland ..	1,070,000	138,750	931,250	355,000	576,250
South Australia ..	1,290,702	122,636	1,168,066	418,003	750,063
Western Australia ..	1,060,839	202,911	857,928	183,700	674,228
Tasmania ..	598,050	44,850	553,200	29,640	523,560
Total ..	17,272,745	1,628,305	15,644,440	4,490,422	11,154,018

(a) No deduction has been made for depreciation and maintenance.

(ii) *States 1933-34 to 1942-43.* In the following table the net value of poultry products and the net value per head of population are given by States for each year since 1933-34:—

### NET VALUE OF POULTRY PRODUCTS.

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
NET VALUE. (a)							
	£	£	£	£	£	£	£
1933-34 ..	1,810,000	2,243,044	270,584	250,037	307,185	298,510	5,179,360
1934-35 ..	1,849,000	2,185,047	248,679	339,335	322,478	317,120	5,261,659
1935-36 ..	2,203,000	2,333,620	299,000	257,088	270,414	305,440	5,668,562
1936-37 ..	2,186,000	2,301,568	322,000	244,354	288,624	338,540	5,681,086
1937-38 ..	2,248,000	2,902,026	362,000	326,492	251,060	367,110	6,456,688
1938-39 ..	2,658,000	3,112,609	376,000	436,425	294,216	425,240	7,302,490
1939-40 ..	2,337,000	3,099,861	319,000	532,747	292,756	397,470	6,978,834
1940-41 ..	2,526,000	2,283,963	403,000	398,312	270,055	383,310	6,263,640
1941-42 ..	2,225,000	2,636,248	419,500	440,105	329,571	446,330	6,496,754
1942-43 ..	3,392,000	5,237,917	576,250	750,063	674,228	523,560	11,154,018

### NET VALUE PER HEAD OF MEAN POPULATION.

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1933-34 ..	0 13 10	1 4 7	0 5 8	0 8 7	0 13 11	1 6 1	0 15 7
1934-35 ..	0 14 1	1 3 10	0 5 2	0 11 7	0 14 7	1 7 8	0 15 8
1935-36 ..	0 16 7	1 5 5	0 6 2	0 8 9	0 12 1	1 6 6	0 16 10
1936-37 ..	0 16 4	1 4 10	0 6 6	0 8 4	0 12 9	1 9 2	0 16 8
1937-38 ..	0 16 7	1 11 2	0 7 3	0 11 1	0 11 0	1 11 3	0 18 10
1938-39 ..	0 19 5	1 13 2	0 7 6	0 14 8	0 12 9	1 15 11	1 1 1
1939-40 ..	0 17 0	1 12 10	0 6 3	0 17 10	0 12 7	1 13 3	1 0 0
1940-41 ..	0 18 2	1 3 9	0 7 10	0 13 4	0 11 5	1 11 10	0 17 7
1941-42 ..	0 15 11	1 7 0	0 8 1	0 14 6	0 14 1	1 17 2	0 18 3
1942-43 ..	1 4 0	2 13 2	0 11 1	1 4 6	1 8 1	2 3 4	1 11 0

(a) No deduction has been made for depreciation and maintenance.

4. War-time Contract—Eggs.—The United Kingdom Government contracted to purchase 9 million dozen eggs up to 31st December, 1939. A further contract was entered into to take eggs between July and December, 1940, at slightly increased prices according to grade. Early in 1941 the United Kingdom Government advised that refrigerator

shipping space would not be available for the export of eggs in shell and the Commonwealth Government was asked to process all surplus eggs into dried egg powder. Further details may be found in Chapter XXVII. "Miscellaneous".

5. **Oversea Trade in Poultry Products.**—The Australian overseas export of poultry products is confined chiefly to eggs in shell and egg contents which are mainly consigned to the United Kingdom; New South Wales, Victoria and South Australia are at present the largest exporters. Exports of eggs from Australia rose from less than 3 million dozen valued at £219,000 in 1928–29 to 21.7 million dozen valued at more than £1.1 million in 1934–35, but declined to 10.3 million dozen in 1939–40. A high level of exports in 1940–41 was followed by a steep decline in 1941–42 and a further decrease in 1942–43 to almost negligible quantities. A feature has been a reverse trend in egg contents for which an excess of imports in 1939–40 has changed to an excess of exports of 1.1 million, 5.9 million and 2.7 million for 1940–41, 1941–42 and 1942–43 respectively.

The overseas trade during the five years ended 1942–43 was as follows :—

### POULTRY PRODUCTS : TRADE, AUSTRALIA.

*Australian Currency Values.*

Particulars.			1938–39.	1939–40.	1940–41.	1941–42.	1942–43.
<b>LIVE POULTRY.</b>							
Imports	..	No.	29	3	12	1	..
"	..	£	139	20	53	4	..
Exports	..	No.	2,189	4,462	2,194	330	70
"	..	£	970	3,772	1,442	161	75
Net Exports	..	No.	2,160	4,459	2,182	329	70
"	..	£	831	3,752	1,389	157	75
<b>FROZEN POULTRY.</b>							
Imports	..	lb.	83	148	..	14,336	..
"	..	£	8	8	..	1,527	..
Exports	..	pair	21,768	63,310	44,728	21,010	8,314
"	..	£	19,917	43,457	27,521	15,815	4,285
Net Exports	..	(a)	(a)	(a)	(a)	(a)	8,314 (pair)
"	..	£	19,909	43,449	27,521	14,288	4,285
<b>EGGS.</b>							
Imports	..	doz.	105,330	5,364	3,347	2,620	..
"	..	£	8,188	318	296	292	..
Exports	..	doz.	10,144,344	10,279,346	17,881,732	6,306,532	394,600
"	..	£	638,159	597,854	1,122,758	402,795	33,385
Net Exports	..	doz.	10,039,014	10,273,982	17,878,385	6,303,912	394,600
"	..	£	629,971	597,536	1,122,462	402,503	33,385
<b>EGG CONTENTS.</b>							
Imports	..	lb.	68,567	60,075	718	..	..
"	..	£	4,936	4,087	109	..	..
Exports	..	lb.	650,470	560	1,095,356	5,909,610	2,723,212
"	..	£	23,065	18	45,354	762,647	351,346
Net Exports	..	lb.	581,903	—59,515	1,094,638	5,909,610	2,723,212
"	..	£	18,129	—4,069	45,245	762,647	351,346

(a) Quantity not available.

NOTE.—Minus sign (—) signifies net imports.

### § 7. Bee-Farming.

1. **General.**—Although practised to some extent as a separate industry, bee-farming is frequently carried on in conjunction with agriculture or dairying. The returns of honey from productive hives during 1941-42 gave an average of 90.2 lb. per hive and the average quantity of wax was 1.0 lb. per hive.

2. **Production of Honey and Bees-wax.**—The number of hives and the production of honey and bees-wax during the year 1941-42 are given in the following table. As these details have been collected from holdings of one acre and upwards, any production from smaller areas is omitted and consequently the production to that extent is understated. In Victoria and South Australia, however, the compulsory registration of bee-keepers enables the collection to cover all producers and the production for these States is considered to be complete.

#### BEEHIVES, HONEY AND BEES-WAX, 1941-42.

State.	Beehives.			Honey Produced.		Bees-wax Produced.	
	Pro- ductive.	Unpro- ductive.	Total.	Quantity.	Gross Value.	Quantity.	Gross Value.
	No.	No.	No.	lb.	£	lb.	£
New South Wales (a)	669,898	610,738	686,636	7,465,926	148,000	124,432	13,000
Victoria ..	68,697	17,047	85,744	5,496,851	148,873	64,484	7,523
Queensland ..	10,201	7,073	17,274	456,000	8,583	19,337	1,934
South Australia ..	649,354	60,177	688,531	4,400,000	82,500	40,000	4,208
Western Australia ..	17,198	1,854	19,052	1,863,765	29,537	22,296	1,908
Tasmania ..	3,745	1,918	5,663	80,982	2,280	1,699	220
Aust. Cap. Territory	26	14	40	300	(a) 7	..	..
Australia ..	219,119	53,821	272,940	19,763,824	419,780	272,248	28,793

(a) Estimated.

(b) Year 1940-41.

The table hereunder gives the production of honey and bees-wax for the last five years:—

#### HONEY AND BEES-WAX PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Australia.
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##### HONEY.

	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
1937-38	3,356,609	4,541,516	435,274	2,408,043	1,541,691	297,311	2,475	12,582,919
1938-39	2,723,719	1,340,046	1,164,536	2,940,877	754,254	148,473	1,280	9,073,185
1939-40	2,477,381	2,752,125	1,049,442	2,388,647	828,168	164,764	770	9,661,297
1940-41	4,771,422	4,503,927	1,174,427	5,324,611	1,246,354	151,168	5,896	17,177,805
1941-42	7,465,926	5,496,851	456,000	4,400,000	1,863,765	80,982	300	19,763,824

##### BEES-WAX.

	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
1937-38	49,945	54,184	7,726	31,411	27,626	3,069	31	173,992
1938-39	43,780	22,285	17,463	40,257	15,050	1,780	60	140,675
1939-40	42,393	35,630	15,259	30,952	11,549	1,668	25	137,476
1940-41	68,670	56,850	16,016	66,527	16,423	2,388	11	226,885
1941-42	124,432	64,484	19,337	40,000	22,296	1,699	..	272,248



The production of honey and bees-wax varies greatly from year to year according to the seasonal conditions. During the five years ended 1941-42, New South Wales produced on the average 4,159,000 lb. of honey and 65,800 lb. of bees-wax; Victoria produced 3,727,000 lb. of honey and 46,700 lb. of wax; and South Australia 3,492,000 lb. of honey and 41,800 lb. of wax. These States together accounted for 83.3 per cent. of the total Australian production of honey and 81.1 per cent. of the bees-wax. Next in order of importance were Western Australia, Queensland and Tasmania.

3. Value of Production—Gross and Net.—(i) *General.* The following table shows the gross, local and net values of production which have been compiled by the Statisticians of the several States on uniform methods. These data are based upon actual records but as previously explained it is known that the production in some States is understated. As production costs are not known they are not taken into account and consequently the gross production valued at the farm and net values shown are identical:—

#### GROSS, LOCAL AND NET VALUE OF BEE PRODUCTS, 1942-43.

State.		Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Farm.	Net Value of Production.(a)
		£	£	£	£
New South Wales .. ..	..	44,000	4,000	40,000	40,000
Victoria .. ..	..	149,889	19,481	130,408	130,408
Queensland .. ..	..	11,000	1,250	9,750	9,750
South Australia .. ..	..	126,042	15,255	110,787	110,787
Western Australia .. ..	..	30,000	..	30,000	30,000
Tasmania .. ..	..	2,500	120	2,380	2,380
Total .. ..	..	363,431	40,106	323,325	323,325

(a) No deduction has been made for depreciation and maintenance.

(ii) *States 1933-34 to 1942-43.* In the following table the net value of bee products and the net value per head of population are given by States for each year since 1933-34:—

#### NET VALUE OF BEE PRODUCTS.

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
NET VALUE. (a)							
	£	£	£	£	£	£	£
1933-34 .. ..	22,000	17,345	8,740	24,140	9,491	4,170	85,886
1934-35 .. ..	95,000	39,540	10,458	43,052	14,037	1,420	203,507
1935-36 .. ..	68,000	77,505	6,000	31,367	12,137	4,210	199,219
1936-37 .. ..	43,000	45,360	5,000	28,053	19,803	2,740	143,956
1937-38 .. ..	51,000	59,930	5,000	20,645	18,850	5,180	160,605
1938-39 .. ..	43,000	23,448	15,000	27,857	10,591	2,770	122,666
1939-40 .. ..	42,000	62,838	14,000	31,698	11,976	3,710	166,222
1940-41 .. ..	102,000	92,010	19,000	72,693	19,251	4,030	308,984
1941-42 .. ..	146,000	132,956	19,500	75,698	31,445	2,380	407,979
1942-43 .. ..	40,000	130,408	9,750	110,787	30,000	2,380	323,325

(a) No deduction has been made for depreciation and maintenance.

NET VALUE OF BEE PRODUCTS—*continued.*

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
NET VALUE PER HEAD OF MEAN POPULATION. (a)							
1933-34 .. ..	s. d. 0 2	s. d. 0 2	s. d. 0 2	s. d. 0 10	s. d. 0 5	s. d. 0 4	s. d. 0 3
1934-35 .. ..	0 8	0 5	0 3	1 6	0 7	0 1	0 7
1935-36 .. ..	0 6	0 10	0 1	1 1	0 6	0 4	0 7
1936-37 .. ..	0 4	0 6	0 1	0 11	0 10	0 3	0 5
1937-38 .. ..	0 5	0 8	0 1	0 8	0 10	0 5	0 6
1938-39 .. ..	0 4	0 3	0 3	0 11	0 5	0 3	0 4
1939-40 .. ..	0 4	0 8	0 3	1 1	0 6	0 2	0 6
1940-41 .. ..	0 9	1 0	0 4	2 5	0 10	0 4	0 10
1941-42 .. ..	1 0	1 4	0 5	2 6	1 4	0 3	1 2
1942-43 .. ..	0 3	1 3	0 2	3 7	1 3	0 2	0 11

(a) No deduction has been made for depreciation and maintenance.

4. **Oversea Trade in Bee Products.**—In normal years the production of honey exceeds Australian requirements, and a small quantity is available for export. The imports into the United Kingdom average 78,000 cwt. annually, of which Australia supplies approximately 7,700 cwt. At the Imperial Economic Conference at Ottawa in 1932 the representatives of the United Kingdom, on behalf of their Government, agreed to the imposition of an import duty of 7s. per cwt. on foreign honey. For the year 1941-42 the exports from Australia amounted to £312,679 compared with a total of £51,959 in the following year. Of the 10.2 million lb. of honey exported in 1941-42, 9.7 million lb. was shipped to the United Kingdom. The more general use of frame-hives has reduced the production of wax, and as a result the quantity imported has exceeded that exported during each of the last five years.

For the year 1941-42, the exports of honey amounted to 10,223,707 lb. compared with 1,332,027 lb. in 1942-43. The imports of bees-wax amounted to 156,484 lb. in 1941-42 compared with 233,163 lb. in 1942-43.

## § 8. Exports of Australian Farmyard, Dairy and Bee Products.

The quantities and values of Australian farmyard, dairy and bee products exported during each of the five years ended 1942-43 are shown below :—

## AUSTRALIAN FARMYARD, DAIRY AND BEE PRODUCTS : EXPORTS.

Particulars.	Unit of Quantity.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
QUANTITY.						
Bees-wax .. ..	lb.	5,565	24,323	6,774	956	56
Butter .. ..	"	229,542,779	262,319,057	195,708,596	130,347,196	124,320,720
Cheese .. ..	"	35,924,467	43,055,779	33,907,833	31,457,305	25,964,332
Eggs not in shell .. ..	"	650,470	560	1,095,356	5,909,610	2,723,212
Eggs .. ..	doz.	10,144,344	10,279,346	17,881,732	6,306,532	394,600
Feathers, undressed .. ..	"	(a)	(a)	(a)	(a)	(a)
Honey .. ..	lb.	687,007	4,631,781	4,194,038	10,223,707	1,332,027
Lard .. ..	"	5,490,959	14,324,614	15,652,900	7,812,207	5,141,939
Meats—						
Bacon and Ham .. ..	"	1,739,053	4,247,554	6,676,900	5,764,260	66,043,208
Frozen poultry .. ..	pr.	21,768	63,310	44,728	21,010	8,314
Frozen pork .. ..	lb.	30,716,417	52,202,821	74,889,552	34,240,367	1,997,030
Milk, concentrated and preserved .. ..	"	19,106,953	32,219,408	56,315,000	75,641,102	59,135,863
Pigs, live .. ..	No.	69	54	208	28	..
Poultry, live .. ..	"	2,189	4,462	2,194	330	70

(a) Quantity not available.

(b) Includes amount exported as tinned bacon.

AUSTRALIAN FARMYARD, DAIRY AND BEE PRODUCTS: EXPORTS—*contd.*

Particulars.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
VALUE.					
	£A.	£A.	£A.	£A.	£A.
Bees-wax .. .. .	148	2,127	527	40	6
Butter .. .. .	12,891,837	13,894,718	11,973,485	8,124,975	8,083,660
Cheese .. .. .	1,074,008	1,440,140	1,543,909	1,428,111	1,223,184
Eggs not in shell .. .. .	23,065	18	45,354	762,647	351,346
Eggs .. .. .	638,159	597,854	1,122,758	402,795	33,385
Feathers, undressed .. .. .	307	665	2,840	3,497	4,731
Honey .. .. .	13,957	128,974	126,468	312,679	51,959
Lard .. .. .	67,744	182,564	196,857	131,020	107,730
Meats—					
Bacon and ham .. .. .	119,994	274,932	439,655	395,031	405,290
Frozen poultry .. .. .	19,917	43,457	27,521	15,815	4,285
Frozen pork .. .. .	882,117	1,561,432	2,302,656	1,107,929	85,885
Milk, concentrated and preserved .. .. .	791,100	1,126,066	1,528,951	2,059,355	1,858,137
Pigs, live .. .. .	621	387	883	272	..
Poultry, live .. .. .	970	3,772	1,442	161	75
Total .. .. .	16,523,944	21,257,106	19,313,306	14,744,327	12,213,673

## § 9. British Imports of Dairy Products.

1. Quantities and Values.—The following table gives the quantities and values of the principal dairy products imported into the United Kingdom during the years 1935 to 1939. Figures for later years are not available :—

## DAIRY PRODUCTS: IMPORTS INTO UNITED KINGDOM.

Products.	—	1935.	1936.	1937.	1938.	1939.
Butter .. .. .	cwt.	9,608,016	9,740,735	9,417,669	9,517,913	8,736,967
" .. .. .	£	39,328,128	44,385,148	47,362,965	50,873,133	48,424,422
Cheese .. .. .	cwt.	2,714,351	2,676,371	2,935,907	2,927,326	2,845,425
" .. .. .	£	6,649,093	7,783,747	9,252,915	9,681,245	8,868,544
Milk, concentrated and preserved .. .. .	cwt.	2,005,528	1,926,629	1,978,313	1,989,552	1,698,896
" .. .. .	£	2,435,822	2,407,028	2,819,107	3,160,266	2,817,760
Bacon and ham .. .. .	cwt.	7,603,672	7,241,374	7,600,134	7,532,236	7,895,493
" .. .. .	£	30,462,249	30,247,252	32,440,620	33,936,331	36,706,410
Pork (a) .. .. .	cwt.	915,098	1,025,156	1,057,159	1,180,866	988,804
" .. .. .	£	2,509,315	2,780,455	3,250,389	3,680,644	3,036,040

(a) Chilled or frozen.

2. Butter.—(i) Imports. Australia has for many years supplied a large proportion of the butter imported into the United Kingdom. The quantity in 1939 amounted to 1,973,454 cwt., or 23 per cent. of the total importation. The Australian contribution was valued at £11,090,254 and was exceeded only by that received from New Zealand and Denmark. These three countries combined supplied 71 per cent. of the total imports in 1938 and in 1939. Later details are not available :—

## BUTTER: IMPORTS INTO UNITED KINGDOM, 1939.

Country from which Imported.	Quantity.	Value.	Country from which Imported.	Quantity.	Value.
	Cwt.	£		Cwt.	£
New Zealand .. .. .	2,094,417	12,060,037	Estonia .. .. .	149,807	707,027
Denmark .. .. .	2,031,353	11,799,324	Argentina .. .. .	113,198	606,024
Australia .. .. .	1,973,454	11,090,254	Union of South Africa .. .. .	112,617	646,601
Netherlands .. .. .	834,106	4,078,747	British Possessions, n.e.i. .. .. .	112,194	597,192
Lithuania .. .. .	247,509	1,268,671	Foreign Countries, n.e.i. .. .. .	40,104	206,420
Sweden .. .. .	239,165	1,315,660			
Latvia .. .. .	237,284	1,118,944			
Eire .. .. .	227,368	1,386,750			
Poland .. .. .	162,575	728,346			
Finland .. .. .	161,816	814,425	Total .. .. .	8,736,967	48,424,422



(ii) *London Prices.* Fluctuations in prices in London during recent years are given in the following table. Until September, 1939, the prices quoted represent the mean of the top prices quoted weekly for choicest salted Australian butter together with their f.o.b. equivalents in Sydney and Melbourne in terms of Australian currency. Since September, 1939, the price represents that fixed in accordance with the contract between the Governments of Australia and the United Kingdom for choicest Australian butter. Pence have been omitted throughout.

**AVERAGE PRICE PER CWT. OF AUSTRALIAN CHOICEST BUTTER IN LONDON  
(WITH F.O.B. EQUIVALENTS IN AUSTRALIAN CURRENCY).**

Month.	1937-38.		1938-39.		1939-40.		1940-41-42.		1942-43-44.	
	London.	Australia. (a)	London.	Australia. (a)	London.	Australia.	London.	Australia.	London.	Australia.
	Shillings (Stg.).	Shillings (Aust.).	Shillings (Stg.).	Shillings (Aust.).	Shillings (Stg.).	Shillings (Aust.).	Shillings (Stg.).	Shillings (Aust.).	Shillings (Stg.).	Shillings (Aust.).
July ..	112	126	120	135	114	(a)127	(c)110	(b)137	(c)114	143
August ..	116	130	118	132	110	(a)123	(c)110	(b)137	(c)114	143
September ..	119	134	116	130	120	(a)135	(c)110	(b)137	(c)114	143
October ..	139	158	111	124	(c)110	(b)137	(c)110	(b)137	(c)114	143
November ..	130	147	104	115	(c)110	(b)137	(c)110	(b)137	(c)114	143
December ..	111	124	107	119	(c)110	(b)137	(c)110	(b)137	(c)114	143
January ..	109	122	120	134	(c)110	(b)137	(c)110	(b)137	(c)114	143
February ..	111	124	118	132	(c)110	(b)137	(c)110	(b)137	(c)114	143
March ..	117	131	115	128	(c)110	(b)137	(c)110	(b)137	(c)114	143
April ..	124	140	113	126	(c)110	(b)137	(c)110	(b)137	(c)114	143
May ..	127	143	107	119	(c)110	(b)137	(c)110	(b)137	(c)114	143
June ..	120	135	113	126	(c)110	(b)137	(c)110	(b)137	(c)114	143

(a) Sydney and Melbourne. (b) Equivalent of contract price. (c) Contract price f.o.b. Australian ports. Equivalent under pre-war conditions would be 122s. stg. and 126s. stg. during 1942-44.

3. *Cheese.*—The value of cheese imported into the United Kingdom in 1939 was £8,868,544, of which £4,469,171 was received from New Zealand, and £2,440,005 from Canada. Small experimental shipments from Australia were made in 1908 and following years, fair prices being realized. The value of the imports from Australia during 1939 amounted to £958,333. Later details are not available.

4. *Bacon and Ham.*—Of a total import of bacon and ham valued in 1939 at £36,706,410, the United Kingdom received imports to the value of £16,625,749 from Denmark, £7,200,278 from Canada, £2,886,537 from the Netherlands, £2,338,465 from Eire, £2,279,955 from the United States of America, and £1,860,740 from Poland. The import from Australia was small. Later details are not available.

5. *Pork.*—The value of the United Kingdom imports of pork (frozen and chilled) was £3,036,040 in 1939. Imports from Australia were valued at £938,956, showing a further increase over the imports in previous years. The bulk of the supplies were received from New Zealand, valued at £1,293,035. Later details are not available.

6. *Other Products.*—The imports into the United Kingdom from Australia of bees-wax, poultry, game, lard and honey in 1939 were unimportant, but frozen rabbits to the value of £204,931 and eggs in shell to the value of £418,687 representing 80 per cent. and 3 per cent. respectively of the total imports were imported during the year. Later details are not available.

## CHAPTER XXIV.

## FORESTRY.\*

## § 1. General.

1. **Objects of Forestry.**—Scientific forestry aims at the preservation and development of existing forest areas by safeguarding them against fire, pests and destructive agencies generally, by expert supervision of the removal of timber, by judicious thinning and by reafforestation of denuded areas with suitable forest growths of local or exotic origin. It provides also for the continuance of this indispensable form of national wealth by the afforestation of available bare lands proved capable of producing various timbers. Only small areas of virgin forests still remain in Australia, as extensive inroads have been made by timber-getters, by agriculturalists and by pastoralists—who have destroyed large areas by “ring-barking”—and it is not unlikely that climatological changes have resulted therefrom. It is recognized that beneficial consequences follow on the planting of trees on denuded lands, or along eroding coasts, and that a forest covering tends to regulate to the best advantage the effects of rainfall. The existing virgin forests consist of hardwood jungle, or brush, with very little softwood, and the need for extensive softwood planting is urgent.

Efficient forestry is of particular interest in connexion with the Murray River Basin, where a large expenditure from the public funds has been incurred in the provision of locks and weirs and in the formation of irrigation settlements in the lower course of the river. The stability of flow of this river in so far as it can be assured by forest plantation may be regarded as of national importance.

Successful planting of exotics in various parts of Australia has demonstrated that both climate and soil are suitable for the cultivation of a number of highly serviceable softwoods.

2. **Extent of Forests.**—(i) *Australia.* The bulk of the present local timber supply comes from the thickly forested areas in the 30-inch and over rainfall belt south of the tropics, and the 70-inch and over rainfall belt within the tropics. The total forest area included in the divisions specified is comparatively small, and is confined to the following regions:—(a) The coastal belt in the extreme south-west of Western Australia, from a little north of Perth to Albany; (b) the Otway country in the south of Victoria, and the whole of the south-eastern portion of that State; (c) the mountain forests of Victoria and New South Wales; (d) the coastal districts of New South Wales and Queensland; (e) the greater portion of Tasmania; (f) the forests on the Murray River near Echuca; and (g) the cypress pine belt from the Murray northward to Queensland and westward of the coastal belt.

Over 90 per cent. of the timber trees of Australia consists of hardwoods belonging to the genus *Eucalyptus* (Gum Trees). Including the mallees over 400 species are now recognized, but the chief commercial varieties are confined to about 50 species.

In addition to the hardwood forests and the cypress pine belt the coastal strip in Queensland and northern New South Wales provides “rain” or “brush” forests. These tropical forests furnish the serviceable hoop pine and furniture timbers such as black bean, Queensland walnut and maple, silkwood, etc.

\* A specially contributed article dealing with Forestry in Australia appeared as part of this chapter in Official Year Book No. 19 (see pp. 701–12 therein).

The drier wooded area of the continent contains a large number of xerophilous trees and woody shrubs which thrive in regions receiving less than 10 inches of rain per annum. Country devoid of tree growth is rare. Unsuitable soil conditions such as basalt formations, clay-pans, rock exposures or sand-dunes are as a rule more responsible for treeless areas than lack of rainfall. The 300-mile stretch of the Nullarbor Plain is a treeless area where the non-retentive limestone foundation accentuates the effects of a low rainfall. While, however, the major portion of Australia carries trees, and may be said to be wooded (the term "desert" applying to relatively small areas only), dense forest is confined to a very narrow fringe. The savannah forests of the interior yield minor products such as sandalwood and tan barks, but do not produce timber. These open park-like formations carry scattered trees of low habit only. Practically the whole of Papua and New Guinea carries or has carried dense forests, the exceptions being certain small dry belts where the rainfall is less than 70 inches. Norfolk Island was originally covered with a thick jungle.

Special articles relating to Australian Eucalyptus timbers and the chemical products of eucalypts appear in Official Year Book No. 10, pp. 85-98.

Scientific surveys of the forests of the various States have not yet been completed and there are, in consequence, conflicting reports regarding the total forest area of Australia. At the Interstate Conference on Forestry, held at Hobart in April, 1920, it was resolved that a forest area of 24,500,000 acres was necessary to provide for the future requirements of Australia. This area was subsequently adopted at the Premiers' Conference held in May, 1920. Expert foresters, however, consider that approximately 19,500,000 acres represent the possible limit for permanent reservation in Australia. The distribution of the latter area throughout the States was estimated as follows:—

## ESTIMATED FOREST AREA.

State.				Total Forest Area.	Percentage on Total Area.
				Acres.	Per Cent.
New South Wales	..	..	..	4,000,000	2.02
Victoria	..	..	..	5,500,000	9.78
Queensland	..	..	..	6,000,000	1.40
South Australia	..	..	..	500,000	0.21
Western Australia	..	..	..	3,000,000	0.48
Tasmania	..	..	..	500,000	2.98
Australia..				19,500,000	1.02

(ii) *Comparison with Other Countries.* The table hereunder shows the absolute and relative forest areas of Australia and other countries, and the relative areas owned by the State, by Public Institutions and by private individuals, in so far as the details are available. The term "Public Institutions" appears to include local governmental and ecclesiastical authorities, while those held by public companies, co-operative societies, etc., are included with private individuals.

The figures are based on information supplied to the International Institute of Agriculture and are the latest available. Comparisons of the returns for different countries are, however, subject to the qualification that the significance of the term "forest" is not identical in all cases. In older countries, and chiefly in Europe, scientific forestry has been practised for centuries whereas in newer lands, such as Australia, Canada, etc., it is of comparatively recent application. Moreover, considerable areas included as forests in the newer countries contain indigenous growth of little or no commercial value, and effective comparisons cannot, therefore, be made with countries where efficient forestry has been practised for many years.



## FORESTS : AREA AND OWNERSHIP, VARIOUS COUNTRIES.

Country.	Forest Area.	Per cent. of Total Area.	Percentage Owned by—		
			State.	Public Institutions other than State.	Privately.
	Sq. miles.	Per cent.	Per cent.	Per cent.	Per cent.
U.S.S.R. (Russia) ..	3,667,530	44.7	100.0	..	..
Canada .. ..	1,151,402	32.8	(a)	(a)	(a)
United States of America ..	733,539	24.7	(a)	(a)	(a)
India .. ..	307,928	27.5	(a)	(a)	(a)
Nigeria .. ..	234,990	63.8	(a)	(a)	(a)
Finland .. ..	97,540	73.5	39.8	1.7	58.5
Sweden .. ..	89,500	56.5	20.1	3.8	76.1
Japan .. ..	87,678	59.5	(a)	(a)	(a)
Germany .. ..	49,991	27.5	32.6	17.2	50.2
France .. ..	40,768	19.2	13.9	23.6	62.5
Poland .. ..	32,246	21.5	36.1	..	63.9
Australia (b) .. ..	30,469	1.0	(a)	(a)	(a)
Yugoslavia .. ..	29,504	30.6	37.5	28.9	33.6
Norway .. ..	29,454	24.7	13.0	6.4	80.6
Turkey .. ..	28,703	9.7	94.4	..	5.6
Rumania .. ..	27,544	24.2	30.5	18.3	51.2
Italy .. ..	22,425	18.7	3.0	34.0	63.0
New Zealand .. ..	20,778	20.2	(a)	(a)	(a)
Spain .. ..	19,305	10.0	(a)	(a)	(a)
Czechoslovakia .. ..	17,925	33.0	20.4	15.6	64.0
Union of South Africa ..	15,958	3.4	(a)	(a)	(a)
Algeria .. ..	12,257	10.7	(a)	(a)	(a)
Austria .. ..	12,116	37.4	15.7	12.6	71.7
Dutch East Indies .. ..	11,737	23.1	(a)	(a)	(a)
Bulgaria .. ..	11,469	28.8	23.0	58.8	18.2
Greece .. ..	9,291	18.5	69.3	10.3	20.4
Latvia .. ..	6,406	25.2	83.6	1.8	14.6
Great Britain .. ..	4,745	5.4	10.4	1.3	88.3

(a) Not available.

(b) Estimate of forest area possible for permanent reservation.

3. **Requisite Proportion of Forest Area.**—It is generally held that when the forest area in any country falls below 0.86 acres per head of population, that country will be obliged to import timber. Australia possesses 2.8 acres of forest per head of population and normally the excess of imports of timber over exports amounts to approximately 28,000,000 cubic feet. There are two reasons for the excess. In the first place, the area of 19,500,000 acres given as the wooded area comprises all forest lands, reproductive or otherwise. The bulk of this area consists of cut-over forests swept by fire at frequent intervals, and the area of really productive forests has not been ascertained. Secondly, Australia does not possess a sufficient supply of softwoods, and must, therefore—with the exception of a small quantity produced in Queensland, New South Wales and South Australia—import the bulk of its requirements from overseas. Provided that the area of 19,500,000 acres, considered possible of permanent reservation by foresters, was yielding under silvicultural treatment its maximum of hard and soft woods, the timber supply of Australia would be sufficient for a population of 22½ millions.

## § 2. Forestry Activities of the Commonwealth Government.

Forestry was not included amongst the matters transferred from the States to the control of the Commonwealth, and federal supervision, therefore, is restricted to the forests in the Australian Territories. These territories (including Papua, New Guinea and Norfolk Island) cover a large area, and, with the exception of the Northern Territory,

are capable of sound forestry development. It is only within comparatively recent years, however, that any attempt has been made to take stock of the forestry position. The Commonwealth Forestry Bureau was instituted in 1925 to initiate sylvicultural and other forest research work and to provide for the education and training of the professional staffs required by the Commonwealth and the State services. The Bureau received statutory powers under an Act passed in 1930. In the meantime, the Australian Forestry School was established in 1926, and not only was the training of the State forest officers begun, but a nucleus of qualified officers was sent abroad to undergo special courses of instruction with the object of staffing the research side of the Bureau. The financial situation in 1930 and following years delayed progress on the research side, and the Australian Forestry School was the Bureau's main activity. Since then, however, the research work of the Bureau has been developed, and stations established in South Australia and Tasmania on a co-operative basis with the State Forestry services.

The forest resources of the Territories of Papua, New Guinea, Norfolk Island and the Australian Capital have been investigated, and reports in connexion with these have been published. In the case of the Australian Capital area an active forest policy is being developed.

The investigation of the dead product of the forests is entrusted to the Council for Scientific and Industrial Research, which has established a Forest Products Division. Research work is being carried out by this institution in regard to various matters, e.g., paper pulp, seasoning, preservation, tan barks, the chemistry of woods, and the utilization of forest products generally, including the substitution of local for imported woods for such purposes as wood pulp, butter boxes and fruit cases.

### § 3. State Forestry Departments.

1. **Functions.**—With the exception of Queensland, the powers and functions of State forest authorities are laid down under Forestry Acts and Regulations. In each State there is a Department or Commission to control forestry work. The functions of these administrations are as follows :—(a) The securing of an adequate reservation of forest lands; (b) the introduction of proper measures for scientific control and management of forest lands; (c) the protection of forests; (d) the conversion, marketing and economic utilization of forest produce; and (e) the establishment and maintenance of coniferous forests to remedy existing deficiency in softwoods.

Annual reports are issued by each State forest authority.

In Victoria a forestry school has been established at which recruits are trained for the forestry service of the State.

2. **Forest Reservations.**—At the Interstate Forestry Conference held at Hobart in 1920, the State forestry authorities agreed in regard to the necessity of reserving an area of 24,500,000 acres of indigenous forest lands in order to meet the future requirements of Australia but, as previously mentioned, it is the considered opinion of expert foresters that 19.5 million acres only are possible of permanent reservation. The area distributed among the States is set out in § 1, 2 *ante*.

Having been endorsed by the Premiers' Conference held later in the same year, this area was adopted as the Australian forest requirement towards the permanent reservation of which the authorities are now aiming. The progress made in the various States to the end of June, 1943, is shown in the following table :—

AREA OF FOREST RESERVATIONS, 30th JUNE, 1943.

Particulars.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
		Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Dedicated forests	..	5,315,978	4,904,364	3,281,428	(a) 269,496	3,367,216	1,432,084	18,570,566
Timber and fuel reserves	..	1,335,905	(b)	3,097,548	..	2,159,776	(c) 313,814	66,907,043
Total	..	6,651,883	4,904,364	6,378,976	269,496	5,526,992	1,745,898	25,477,609

(a) Includes Timber and Fuel Reserves.  
(d) Incomplete.

(b) Not available.

(c) Excludes Fuel Reserves.

In addition to the work of permanently reserving their respective areas the State foresters are endeavouring to survey all timbered lands with a view to the elimination of those unsuitable for forestry. Considerable areas have been revoked in certain States, while dedications of new areas have resulted in gains to the permanent forest estate.

The area of State forests reserved in perpetuity amounted in June, 1943, to 18,570,566 acres, or 95 per cent. of the area considered possible of permanent reservation in Australia. Of this area a considerable proportion consists of inaccessible mountainous country and cut-over lands, while the Australian area recommended refers to merchantable forest only. The foresters of Australia are, therefore, faced with a difficult task in improving and preserving the existing forests, and in securing the reservation of further suitable forest country to ensure a permanent supply.

The Forestry Departments also control 6,907,043 acres of temporary timber and fuel reserves, but, while these areas contain some land of high value for forestry purposes, the greater part does not justify permanent reservation.

3. **Sylvicultural Nurseries and Plantations.**—Recognition of the necessity for providing by systematic sylviculture for the future softwood timber needs has led to the creation in all of the States of a number of nurseries and plantations. A brief statement showing the locality of these establishments and the nature of their activities will be found in previous issues of the Official Year Book. (See Official Year Book No. 6, pp. 451-3.) Details regarding forest plantations and the number of persons employed are shown as follows:—

#### FORESTRY : AREAS AND EMPLOYMENT, 1942-43.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Total area of indigenous forest improved or regenerated acres	1,417,637	1,046,824	428,816	9,928	525,846	2,600	3,431,651
Total area of effective plantations—							
Hardwoods .. acres	373	2,500	2,713	3,975	(a) 15,785	375	25,721
Softwoods ..	40,061	46,363	29,806	99,275	13,488	1,600	230,593
Number of persons employed "in Forestry Departments—							
Office staff .. No.	204	60	87	43	36	37	467
Field staff .. "	104	154	515	412	(b) 402	59	1,646

(a) Mallet—mainly for bark tanning.  
Allied Works Council.

(b) Includes 149 casual hands and 120 aliens under

4. **Revenue and Expenditure.**—The revenue and expenditure of State Forestry Departments from 1938-39 to 1942-43 are given below:—

#### STATE FORESTRY DEPARTMENTS : REVENUE AND EXPENDITURE.

State.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
REVENUE.					
New South Wales ..	£ 224,266	£ 244,993	£ 306,809	£ 393,202	£ 467,942
Victoria ..	198,157	218,961	325,500	421,086	630,018
Queensland..	764,557	888,360	955,915	959,220	927,982
South Australia ..	101,312	110,897	170,323	240,412	291,403
Western Australia ..	145,724	151,770	161,253	158,692	190,238
Tasmania ..	32,765	33,241	36,087	40,942	50,418
Total ..	1,466,781	1,648,222	1,955,887	2,213,584	2,558,001



STATE FORESTRY DEPARTMENTS: REVENUE AND EXPENDITURE—*contd.*

State.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
EXPENDITURE.					
	£	£	£	£	£
New South Wales ..	250,355	191,086	229,009	528,393	517,621
Victoria(a) ..	406,175	475,517	615,165	741,928	1,088,020
Queensland. . .	764,545	865,288	810,918	814,724	691,691
South Australia ..	182,633	222,915	228,244	201,089	238,791
Western Australia(b) ..	164,943	154,870	153,088	128,993	176,857
Tasmania ..	71,437	70,852	68,775	71,679	60,263
Total ..	1,840,088	1,980,528	2,111,799	2,546,806	2,773,243

(a) Includes expenditure from Relief Works, 1938-39, £167,611; 1939-40, £148,125; 1940-41, £49,798; 1941-42, £5,136; 1942-43, £72. (b) Includes expenditure from General Loan and Trust Funds, 1938-39, £136,254; 1939-40, £126,174; 1940-41, £124,542; 1941-42, £100,537; 1942-43, £98,908.

In South Australia, with fewer forestry resources than the other States, a progressive policy of afforestation has been followed over the past 66 years and extensive areas planted with softwoods. In 1942-43 the revenue from forests in this State for the first time exceeded expenditure.

#### § 4. The Australian Forestry School.

The Australian Forestry School situated at Canberra in the Australian Capital Territory was established in 1926 by the Commonwealth Government to meet the demand of the States for an institution which would give a professional training at least equal to that afforded by the recognized forestry schools abroad.

Under the Forestry Bureau Act 1944, which came into operation on 3rd May, 1944, a Board of Higher Forestry Education has been established to maintain the standard of the diploma course at the school and to advise as to pre-requisite university courses.

Under existing arrangements the head of the State forestry service may nominate candidates for enrolment at the school. According to the system in vogue in each State, the nomination may be made either at school-leaving age or after the candidate has successfully completed the specified university course. In the first case, the youth is helped throughout his university career and is given employment in practical work during the long vacations to test his suitability as a forestry officer; in the second case he is chosen later, and the practical tests are not made until the long vacation immediately preceding his entry to the school. The possession of a nomination by a State government service is not, however, essential for enrolment, since any candidate possessing the necessary qualifications will be accepted for the diploma course, and in special cases applicants desirous of studying a particular branch of forestry will be required to follow certain lectures only. Refresher or post-graduate courses are arranged to meet the needs of senior foresters.

A candidate for enrolment in the diploma course must possess—(a) a degree of a university; or (b) a certificate that he has completed the special two years' preliminary course at a university.

The qualifications for enrolment may be waived to assist an applicant of exceptional ability with a record of long service in a State Forestry Department, who has been specially recommended by the head of that service. Such applicants must show proof of education equal to that required for a school leaving certificate.

The course of instruction extends over three years, the first two of which are spent at the school, and the third in one of the forestry services of Australia.

The Commonwealth diploma of forestry is awarded to students on the following conditions:—(a) successful completion of theoretical course; (b) satisfactory field work during the course; and (c) one year's satisfactory practical forestry work following the school course.

Students who have passed the approved two-year preliminary science course at the Universities of Adelaide, Melbourne, Western Australia, Queensland or Sydney, and two years of Diploma course at the School, may be granted the degree B.Sc.F. by their Universities, subject to certain conditions laid down, particulars of which may be obtained from the Registrar of the University concerned.

### § 5. Forest Congresses.

References to the various Forestry Conferences held in Australia and elsewhere are given in Official Year Book No. 22, p. 743. The First British Empire Forestry Conference was held in London in 1920. Subsequent Conferences were held in Ottawa 1923, Australia 1928, and South Africa 1935, but the fifth Conference which was to have been held in India in 1940 was postponed because of the war. Publications issued in connexion with these Conferences are available on application to the various State and Commonwealth forestry authorities.

### § 6. Forestry Production.

1. **Timber.**—Particulars regarding logs treated and the production of rough sawn timber in forest sawmills in each State for the year 1942-43 are shown in the following table:—

#### OUTPUT OF NATIVE TIMBER : FOREST SAWMILLS, 1942-43.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Total.
LOGS TREATED INCLUDING THOSE SAWN ON COMMISSION.							
	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.
Hardwood ..	165,886	188,244	130,129	6,652	273,466	140,428	904,805
Softwood ..	85,206	33,040	141,894	46,236	1,492	4,150	312,018
Total ..	251,092	221,284	272,023	52,888	274,958	144,578	1,216,823

#### ROUGH SAWN TIMBER PRODUCED FROM LOGS ABOVE.

	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.
Hardwood ..	110,675	106,065	82,659	3,148	107,616	86,850	497,013
Softwood ..	52,646	23,619	98,544	25,770	596	3,014	204,189
Total ..	163,321	129,684	181,203	28,918	108,212	89,864	701,202

The next table gives the sawn output of native timber in both forest and town sawmills and in joinery works, box and case factories and other woodworking establishments in each State for the last five years.

#### SAWN OUTPUT OF NATIVE TIMBER : ALL MILLS.

State.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.
New South Wales ..	179,350	191,583	219,020	256,145	250,018
Victoria ..	120,197	138,634	174,018	194,374	182,045
Queensland ..	193,250	210,375	209,609	218,413	185,713
South Australia ..	14,537	19,232	23,019	30,007	35,194
Western Australia ..	125,453	117,819	115,219	119,731	109,377
Tasmania ..	84,228	79,330	84,749	95,005	93,381
Total ..	717,015	756,973	825,634	913,675	855,728

In addition to the sawn timber shown in the table, a large amount of other timber, e.g., sleepers, piles, poles, fencing material, timber used in mining, and fuel, is obtained from forest and other lands. Complete information in regard to the volume of this output is, however, not available. In Western Australia, particulars are obtained of the quantities of timber hewn by contractors for the Railway Department, mines, etc., as well as of the quantities produced by other agencies outside forest sawmills, but the figures have not been included in the preceding two tables. The quantities so produced in the last five years were as follows:—1938–39, 35,862,540 sup. feet; 1939–40, 34,844,172 sup. feet; 1940–41, 31,659,666 sup. feet; 1941–42, 26,295,114 sup. feet; and 1942–43, 20,664,828 sup. feet. The annual reports of the Forest Departments of the States contain particulars concerning the output of timber from areas under departmental control, but owing to lack of uniformity in classification and measurement, accurate determination of total production cannot be made. Moreover, there is a moderate quantity of hewn timber produced from privately owned land, but information regarding output is not available.

2. **War Time Control of Timber.**—Because of its importance to the war effort of Australia, the supply of timber, immediately on the outbreak of war, came under the control of the Department of Munitions. With the increasing importance of timber as a raw material in the production of munitions, and for defence construction, a Controller of Timber was appointed in April, 1941, to plan and co-ordinate the supply of timber. Under an order of 8th October, 1941, the Controller of Timber was given power to prohibit the cutting of timber, to determine the priority of orders, and to collect returns from persons dealing with timber. On 23rd March, 1942, these powers were extended by the National Security (Timber Control) Regulations to cover all phases in the production, treatment and use of timber. From time to time orders have been issued restricting the use of certain timbers.

3. **Stocks of Timber, Logs and Sawn.**—Particulars are given below of timber stocks held on 30th June, 1943, as reported by mills and other factories included in the wood-working group. These latter establishments include box and case factories and joinery works, etc.

#### STOCKS OF TIMBER REPORTED BY FACTORIES, 30th JUNE, 1943.

State.	Logs.			Sawn Timber.		
	Hardwood.	Softwood.	Total.	Hardwood.	Softwood.	Total.
	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.	'000 sup. feet.
New South Wales	6,570	4,595	11,165	(a)	(a)	41,347
Victoria ..	7,372	1,080	8,452	34,302	9,672	43,974
Queensland(b) ..	5,259	2,347	7,606	1,620	5,002	6,622
South Australia	143	2,708	2,851	6,714	9,132	15,846
Western Australia	1,907	..	1,907	24,771	261	25,032
Tasmania ..	3,587	55	3,642	14,285	59	14,344
<b>Total ..</b>	<b>24,838</b>	<b>10,785</b>	<b>35,623</b>	<b>(c)81,692</b>	<b>(c)24,126</b>	<b>147,165</b>

(a) Not available.

(b) Incomplete.

(c) Excludes New South Wales.

4. **Paper and Wood Pulp.**—(i) *Tasmania.* During recent years the manufacture of paper from Australian-grown timber has been established in three States. In Tasmania two large mills are making paper from indigenous hardwoods. The first of these started production of paper at Burnie in August, 1938, from imported pulp until the pulp mill, using local hardwood, came into operation a few months later. At this mill, pulp is produced by the soda process and the caustic soda necessary for cooking the wood and chlorine for bleaching the pulp are produced by a separate plant located alongside the



mill. Two paper machines are operated. The larger machine has the capacity to produce paper 180 inches wide at 800 feet per minute, while the smaller machine is capable of producing paper 90 inches wide at about 400 feet per minute. The paper produced covers a wide range of high class printing, writing, drawing, duplicating and blotting papers. At Boyer on the Derwent River, near Hobart, production of newsprint commenced in February, 1941. The newsprint is manufactured from local ground wood pulp to which is added a small proportion of sulphite pulp imported from Canada. The paper-making machine installed is capable of making paper 161 inches wide at the rate of 1,200 feet per minute, and when running at full capacity can produce about 540 tons of newsprint per week. At both these mills logs are taken from the forests by means of tractors and transported to the mills by rail. Power is supplied by the Tasmanian Hydro-electric Commission and hardwood not suitable for pulping is used as fuel. During 1941-42, 43,372 cords of pulp wood and 37,530 cords of firewood were delivered to these mills.

(ii) *Victoria*. In Victoria the production of wood pulp for papermaking commenced in January, 1937, with a pilot plant having the capacity of about 3,000 tons of air dried pulp per annum. In October, 1939, the main plant at Maryvale, with a capacity of 27,000 tons of pulp per annum, commenced operations. Associated with the pulp mill is a paper-making plant capable of producing about 20,000 tons of kraft paper per annum. The timber used at this mill consists mainly of hardwoods at present unsuitable for other purposes. In addition a small quantity of pine, mainly thinnings, mill waste and special softwood for production of cellulose are used. Kraft wrapping papers are produced and recently the production of cellulose for the manufacture of explosives has been undertaken. During 1941-42 the wood taken from Crown Lands for this mill amounted to 405,935 cubic feet.

(iii) *South Australia*. In South Australia a pulp and paper mill commenced operations during 1941-42 at Mount Burr. When completed and in full production the mill will use considerable quantities of softwoods from the Mount Burr and Penola pine plantations. During 1941-42, 757,857 super. feet of softwoods from State forests were supplied to the mill and a small quantity of cellulose, for the manufacture of explosives, was produced. In addition during 1941-42, 8,696,503 super. feet of pulp wood from the softwood plantations of South Australia were exported to Victoria for conversion into pulp.

**5. Other Forest Products.**—(i) *Veneers, Plywood, Etc.* Cutting of timber for the manufacture of veneers, plywood, etc., has been carried out in most States for a number of years. Recently, however, this has been considerably extended in all States, and much greater use has been made of local-grown timbers, both hard and softwoods. In recent years special attention has been paid to the selection of logs suitable for peeling. In 1941-42 the quantity of plywood produced amounted to 21,979,316 super. feet (solid) and veneers to 3,825,059 super. feet (solid). Since the commencement of the war the peeling of logs for the production of match board and sticks has been carried out in both Victoria and South Australia. In South Australia specially selected logs from the plantations of exotic softwoods are used, while in Victoria use has been made of both plantation softwood and indigenous hardwoods.

(ii) *Charcoal*. As a result of restrictions on the use of petrol, due to the war, a considerable demand has arisen for substitute fuels. The use of producer gas units on mobile vehicles has been encouraged by the Commonwealth Government and special efforts were made to increase the production of charcoal for use in them. Research was carried out by the Forestry and other Departments in each State, and information prepared for the guidance of producers. This resulted in greatly increased production.

(iii) *Eucalyptus Oil*. Oil may be distilled from the foliage of all varieties of eucalyptus, and several of them furnish a product widely known for its commercial and medicinal uses. Complete information regarding Australian production and consumption of eucalyptus oil is not available, but considerable quantities are

manufactured, particularly in Victoria. Oversea exports amounted in 1937-38 to £94,538; in 1938-39 to £86,714; in 1939-40 to £130,422; in 1940-41 to £184,175; and in 1941-42 to £208,282. The bulk of the product is shipped from Victoria to the United Kingdom and the United States of America. Large quantities of the crude oil are used locally in flotation processes in connexion with the recovery of gold and other minerals.

(iv) *Sandalwood and Sandalwood Oil.* Most of the sandalwood is produced in Western Australia where considerable quantities are gathered each year for export to Eastern Countries. Small quantities are also produced in South Australia, Queensland and New South Wales. Details of exports of sandalwood are shown in paragraph 3 (ii) § 8. Oil distilled from Western Australian sandalwood has a medicinal value and is used extensively in the manufacture of perfumes. Quantities of this oil are exported annually to the Eastern States of Australia and oversea countries, principally the United Kingdom. Oversea exports of Australian sandalwood oil amounted in 1937-38 to £18,882; in 1938-39 to £13,964; in 1939-40 to £22,485; in 1940-41 to £8,864; and in 1941-42 to £22,187.

(v) *Grass Tree or Yacca Gum.* South Australia is the chief State producing this gum which is used in the preparation of varnishes and lacquers. Quantities are also obtained in New South Wales and Western Australia but these are small. The production in South Australia during 1941-42 amounted to 889 tons, whilst the exports from Australia amounted to 693 tons valued at £6,888 during the same period.

(vi) *Tan Barks.* The forests of Australia are capable of yielding a wealth of tanning materials; many species of eucalyptus and other genera contain varying proportions of tannin, chiefly in the bark, but also in the wood and twigs. Although many of these species contain higher percentages of tannin than are found in the barks of oak, chestnut and hemlock, formerly the chief source of tannin material in the northern hemisphere, scattered distribution has resulted in the richest tan-bearing species only being used in Australia. These are:—Golden wattle (*Acacia pycnantha*), black or green wattle (*Acacia decurrens* or *mollissima*), and mallet (*Eucalyptus astringens*).

Up to 1913 the production of wattle bark was more than sufficient for local requirements, and an export trade was built up. The supply diminished during the six years ended 1926-27, and Australia imported on the average about 2,900 tons each year from Natal, where the plantations were originally started from Australian seed. From 1927-28 to 1938-39, exports exceeded imports in every year except 1936-37, but since 1939-40 there has been a considerable excess of imports. The chief exporting States are Western Australia, South Australia and Tasmania. This matter is referred to in tables appearing in § 8 following. The other valuable tan bark, mallet (*Eucalyptus astringens*) of Western Australia, is not extensively used in Australian tanneries, but it is exported to Europe and other countries, where it is used for producing a tannin extract. A brief account of the work done by the Council for Scientific and Industrial Research in connexion with tanning materials is given in Official Year Book No. 22, p. 743. The production of extract from the bark of karri (*Eucalyptus diversicolor*), of which very large quantities are available at karri sawmills, has passed the experimental stage, and private enterprise has started production on a commercial scale. The experimental work in kino impregnated marri (*Eucalyptus calophylla*) bark is not yet complete. The production of tan bark in Australia is estimated to exceed 25,000 tons per annum.

6. Value of Production—Gross and Net.—(i) *General.* As the outcome of a series of conferences of Australian Statisticians it is now possible to present the value of forestry production on a more satisfactory basis than was possible hitherto, but the relative proportions of marketing costs to gross production suggest that complete uniformity in method has not yet been obtained. Provision is made for the inclusion of all phases of forestry output, including forest sawmills, the production of logs, poles, piles, sleepers and other hewn timber, firewood, sandalwood and gums and resins. All of these items are not yet collected in all the States, but the omissions are not serious.

## GROSS, LOCAL AND NET VALUE OF FORESTRY PRODUCTION, 1942-43.

State.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Place of Production.	Value of Other Materials Used in Process of Production.	Net Value of Production.(a)
	£	£	£	£	£
New South Wales ..	3,348,000	193,000	3,155,000	..	3,155,000
Victoria ..	2,985,828	399,528	2,586,300	304,268	2,282,032
Queensland..	2,708,000	380,000	2,328,000	..	2,328,000
South Australia ..	1,084,958	73,467	1,011,491	..	1,011,491
Western Australia ..	1,638,701	214,275	1,424,426	1,644	1,422,782
Tasmania ..	873,420	59,480	813,940	..	813,940
Total ..	12,638,907	1,319,750	11,319,157	305,912	11,013,245

(a) No deduction has been made for depreciation and maintenance.

(ii) *States 1933-34 to 1942-43.* In the following table the net value of forestry production and the net value per head of population are given by States for each year since 1933-34.

## NET VALUE OF FORESTRY PRODUCTION.

Year.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Total.
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## NET VALUE. (a)

	£	£	£	£	£	£	£
1933-34 ..	1,737,000	588,837	1,334,088	488,069	729,796	259,360	5,137,150
1934-35 ..	1,922,000	664,800	1,988,751	523,786	1,012,261	325,750	6,437,348
1935-36 ..	2,014,000	692,209	2,076,000	525,936	1,135,851	363,600	6,807,596
1936-37 ..	2,096,000	731,777	2,186,000	570,692	1,314,152	407,300	7,305,921
1937-38 ..	2,179,000	1,029,174	2,514,000	570,199	1,272,707	431,200	7,996,280
1938-39 ..	2,261,000	1,067,732	2,362,000	542,465	1,147,335	399,500	7,780,032
1939-40 ..	2,347,000	1,108,864	2,531,000	605,419	1,087,734	452,520	8,132,537
1940-41 ..	2,576,000	1,355,402	2,734,000	693,162	1,322,138	516,000	9,196,702
1942-42 ..	3,159,000	1,594,643	2,423,000	879,332	1,272,606	722,100	10,050,681
1942-43 ..	3,155,000	2,282,032	2,328,000	1,011,491	1,422,782	813,940	11,013,245

## NET VALUE PER HEAD OF MEAN POPULATION.

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1933-34 ..	0 13 3	0 6 5	1 8 1	0 16 9	1 13 2	1 2 8	0 15 5
1934-35 ..	0 14 7	0 7 3	2 1 5	0 17 11	2 5 8	1 8 5	0 19 3
1935-36 ..	0 15 2	0 7 6	2 2 8	0 17 11	2 10 9	1 11 7	1 0 2
1936-37 ..	0 15 8	0 7 11	2 4 5	0 19 5	2 18 2	1 15 1	1 1 1
1937-38 ..	0 16 1	0 11 1	2 10 6	0 19 4	2 15 8	1 16 8	1 3 4
1938-39 ..	0 16 7	0 11 5	2 6 11	0 18 3	2 9 7	1 13 9	1 2 6
1939-40 ..	0 17 0	0 11 9	2 9 10	1 0 3	2 6 5	1 17 10	1 3 3
1940-41 ..	0 18 6	0 14 1	2 13 0	1 3 1	2 15 11	2 3 0	1 6 1
1941-42 ..	1 2 7	0 16 4	2 6 8	1 9 0	2 14 4	3 0 2	1 8 2
1942-43 ..	1 2 3	1 3 2	2 4 8	1 13 0	2 19 3	3 7 5	1 10 7

(a) No deduction has been made for depreciation and maintenance.

7. *Employment.*—(i) *Census Returns.* The number of persons employed in forestry operations as revealed by the Census of the Commonwealth of Australia at the 30th June, 1933, is shown in the following table:—



## EMPLOYMENT IN FORESTRY, 30th JUNE, 1933.

Sex.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total. (a)
	No.	No.	No.	No.	No.	No.	No.
Males ..	6,446	7,225	4,054	1,549	4,189	2,376	25,839
Females ..	38	29	27	8	7	5	114
Total ..	6,484	7,254	4,081	1,557	4,196	2,381	25,953

(a) Excludes Northern Territory, N.T., and Australian Capital Territory, 132.

(ii) *Logging Operations : Forest Sawmills.* Particulars of employment and costs of logging operations in the forests are given for each State in the following table. These data have been compiled from the details furnished by those establishments which are defined as a forest sawmill as distinct from those defined as town sawmills.

## FOREST SAWMILLS : LOGGING OPERATIONS, 1942-43.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
Number of men employed	No.	(a)	479	58	781	727	
Value of wages paid	£	207,951	75,101	19,032	230,915	153,919	
Other Costs	£	148,584	141,841	64,743	114,027	130,922	
Value of Royalties, etc., paid ..	£	157,146	129,438	120,204	126,530	41,633	(a)
Period worked by men above .. months		(a)	9.42	10.12	11.59	10.06	

(a) Not available.

(iii) *Mill Workers : Forest Sawmills.* Details of the number employed in the milling operations of these forest sawmills are given in the next table. Further details regarding the operations of these mills are given in Chapter XIX. "Manufacturing Industry".

## FOREST SAWMILLS : MILL WORKERS, 1942-43.

Sex.	N.S.W.	Victoria.	Q'land. (a)	S. Aust.	W. Aust.	Tasmania.	Total.
	No.	No.	No.	No.	No.	No.	No.
Males ..	2,852	1,867	4,597	493	1,741	1,526	13,076
Females ..	76	21	154	32	16	18	317
Total ..	2,928	1,888	4,751	525	1,757	1,544	13,393

(a) Includes town sawmills.

## § 7. Commercial Uses of Principal Australian Timbers.

1. *General.*—The uses of the more important Australian timbers are many and varied, and are indicated in previous issues of the Official Year Book.

A list of Australian timbers best known on the local markets appeared in Official Year Book No. 20, p. 713. [Further references are made in "Timber and Forest Products of Queensland" (E. H. F. Swain), published in 1928].

2. *Lack of Uniformity in Nomenclature.*—Unfortunately the vernacular names applied to the gums, ironbarks, etc., in the various States, and even in different parts of the same State, do not always refer to identical timbers. The resulting confusion has not only been productive of loss, but it has, to some extent, prejudicially affected

the timber trade. This subject is referred to at some length in the special article "Australian Eucalyptus Timbers" in Section III., §§ 7 and 8, of Official Year Book No. 10. At the Forestry Conferences previously mentioned, the matter came up for special consideration, and steps were taken to establish a uniform nomenclature.

### § 8. Oversea Trade.

1. Imports.—(i) *Dressed Timber*. The quantities and values of timber imported into Australia during the four years 1938-39 to 1941-42 inclusive are shown according to countries of origin in the following table:—

DRESSED TIMBER : IMPORTS INTO AUSTRALIA.

Country of Origin.	Quantity.				Australian Currency Values.			
	1938-39.	1939-40.	1940-41.	1941-42.	1938-39.	1939-40.	1940-41.	1941-42.
	sup. ft.	sup. ft.	sup. ft.	sup. ft.	£A.	£A.	£A.	£A.
United Kingdom ..	551	105	3	..	48	4	1	..
Canada ..	8,926,950	8,043,430	2,195,759	2,590,844	99,797	101,677	42,462	41,458
New Zealand ..	..	..	38,923	390,439	..	..	1,194	12,840
Other British Countries	2,576	153	..	39,648	23	4	..	1,063
Norway ..	4,209,070	2,038,527	..	..	47,570	24,314	..	..
Sweden ..	1,977,921	1,015,839	..	..	26,687	16,322	1	..
U.S. of America ..	2,242,023	1,451,228	850,404	..	24,203	18,975	15,330	..
Other Foreign Countries	418,430	23,279	..	..	6,771	2,289	..	..
<b>Total ..</b>	<b>17,777,521</b>	<b>12,572,561</b>	<b>3,085,089</b>	<b>3,020,931</b>	<b>205,099</b>	<b>163,585</b>	<b>58,988</b>	<b>55,361</b>

The figures in the table above exclude items such as architraves, veneers, plywood, staves, etc., quantities for which are either not shown, or are expressed in dissimilar units in the Customs entries. The total value of the items so excluded amounted to £48,234 in 1941-42.

Prior to the war the bulk of the imports of dressed timber came from Canada, Norway, Sweden and the United States of America; but since the outbreak of the war increased quantities have been imported from New Zealand. Practically the whole of this timber consists of softwoods—deal and pine—used for lining, weatherboards, flooring, shelving, doors, box-making, etc.

(ii) *Undressed Timber*. Australian imports of undressed timber for the years 1938-39 to 1941-42 are given hereunder:—

UNDRESSED TIMBER, INCLUDING LOGS (a) : IMPORTS INTO AUSTRALIA.

Country of Origin.	Quantity.				Australian Currency Values.			
	1938-39.	1939-40.	1940-41.	1941-42.	1938-39.	1939-40.	1940-41.	1941-42.
	'000 sup. ft.	'000 sup. ft.	'000 sup. ft.	'000 sup. ft.	£A.	£A.	£A.	£A.
United Kingdom ..	115	52	62	85	10,969	5,674	1,081	3,171
Canada ..	296,948	216,716	59,880	35,068	1,225,650	1,169,472	427,880	292,513
India ..	7	39	..	..	287	1,085	..	..
Malaya (British) ..	165	132	214	40	1,389	1,035	1,159	540
New Zealand ..	11,193	15,328	16,244	10,632	173,556	213,721	227,515	160,287
Other British Countries	10,840	7,881	11,003	6,680	75,136	62,248	91,499	53,260
Japan ..	374	377	139	..	8,439	8,418	4,401	..
Netherlands East Indies	20	1	1,987	..	130	4	9,641	..
Norway ..	21	1	..	..	385	145	..	..
New Caledonia ..	1,671	1,236	837	94	6,368	7,135	5,432	686
Philippine Islands	6,879	4,584	2,270	2,365	72,921	60,890	29,644	27,629
Sweden ..	4,654	972	..	..	40,592	8,997	3	..
United States of America ..	12,245	25,205	6,885	1,454	210,092	305,685	99,495	34,255
Other Foreign Countries	2,966	2,351	375	4,282	29,022	22,252	4,046	28,447
<b>Total ..</b>	<b>348,098</b>	<b>274,875</b>	<b>100,586</b>	<b>60,700</b>	<b>1,854,936</b>	<b>1,866,761</b>	<b>902,696</b>	<b>600,788</b>

(a) Excludes timber not measured in super. feet.

By far the larger proportion of the undressed timber imports consists of softwoods such as oregon, redwood, hemlock, western red cedar and yellow pine from Canada and the United States of America; and kauri, rimu and white pine from New Zealand. Amongst the hardwoods imported the principal are oak from the United States of America, and furniture woods from the Pacific Islands.

2. Exports.—(i) *Undressed Timber*. The quantity and value of undressed timber exported from 1938-39 to 1941-42 are given below, together with the countries of destination.

**UNDRESSED TIMBER, INCLUDING LOGS (a) : EXPORTS FROM AUSTRALIA.**

Country to which Exported.	Quantity.				Value.			
	1938-39.	1939-40.	1940-41.	1941-42.	1938-39.	1939-40.	1940-41.	1941-42.
	'000 sup. ft.	'000 sup. ft.	'000 sup. ft.	'000 sup. ft.	£A.	£A.	£A.	£A.
United Kingdom ..	11,750	9,251	8,352	1,650	137,927	110,094	85,135	19,971
Canada ..	223	212	427	355	4,723	4,777	9,027	8,869
Ceylon ..	535	797	39	..	5,563	7,905	392	..
Hong Kong ..	98	..	..	21	1,058	..	..	502
India ..	..	..	4	..	..	..	101	..
Mauritius ..	354	305	162	60	4,520	3,051	1,621	603
New Zealand ..	17,145	10,647	8,861	7,716	245,194	151,500	142,281	148,270
Pacific Islands—								
Fiji ..	838	793	654	329	15,570	12,722	7,720	7,425
Gilbert and Ellice Islands								
Colony ..	63	59	52	14	1,076	1,006	881	350
Papua ..	219	137	430	589	3,458	2,428	8,059	16,487
Solomon Islands ..	143	86	103	48	2,279	1,586	2,217	904
Territory of New Guinea	131	4	18	24	1,970	43	347	307
Other Islands ..	243	529	94	7	5,118	15,394	2,082	164
Union of South Africa ..	7,164	5,470	3,804	2,073	80,668	62,127	42,955	26,994
Other British Countries ..	108	84	241	1,079	1,299	1,245	3,128	18,470
Africa, Portuguese East ..	415	..	79	..	5,023	..	1,316	..
Belgium ..	1,286	33	..	..	19,347	505	..	..
China ..	271	537	22	..	2,322	5,494	505	..
Egypt ..	718	1,690	6,475	2,573	7,186	14,841	77,722	36,041
Germany ..	648	102	..	..	9,989	2,285	..	..
Netherlands ..	234	..	..	..	2,875	..	..	..
Pacific Islands—								
New Caledonia ..	73	196	26	19	1,330	1,743	414	479
New Hebrides ..	49	..	34	16	819	..	978	714
Other Islands ..	21	133	49	38	537	3,247	1,233	1,391
United States of America	867	1,624	1,178	476	26,506	56,162	41,065	13,119
Other Foreign Countries ..	201	1,008	..	1,784	2,389	10,803	..	19,340
Australian Produce ..	43,797	33,697	31,104	18,871	588,746	468,958	429,199	320,400
Other Produce ..	541	1,363	1,765	582	6,079	19,604	30,985	11,842
<b>Total ..</b>	<b>44,338</b>	<b>35,060</b>	<b>32,869</b>	<b>19,453</b>	<b>594,825</b>	<b>488,562</b>	<b>460,184</b>	<b>332,242</b>

(a) Excludes Timber not measured in super. feet.

The bulk of the exports of undressed timber were consigned to New Zealand, the United Kingdom, South Africa and the United States of America, and consisted largely of the Western Australian hardwoods, jarrah and karri, which have earned an excellent reputation for such purposes as harbour works and wood paving, etc. Considerable quantities of pole, pile and girder timber are also exported from New South Wales to New Zealand.



(ii) *Sleepers*. Particulars of the quantities and values of sleepers exported are now excluded from the previous table relating to undressed timber, including logs. These details are shown in the following table :—

## RAILWAY SLEEPERS : EXPORTS FROM AUSTRALIA.

Country to which Exported.	Quantity.				Value.			
	1938-39.	1939-40.	1940-41.	1941-42.	1938-39.	1939-40.	1940-41.	1941-42.
	'000 sup. ft.	'000 sup. ft.	'000 sup. ft.	'000 sup. ft.	£A.	£A.	£A.	£A.
United Kingdom ..	1,438	4,880	2,431	..	14,467	50,772	24,965	..
Ceylon ..	5,334	5,834	3,216	..	53,339	58,336	32,156	..
Hong Kong ..	..	..	117	27	..	..	1,022	497
Mauritius ..	563	638	308	212	6,216	6,375	3,085	2,120
New Zealand ..	16,896	5,062	3,094	7,486	165,303	53,893	38,690	115,167
Pacific Islands (British) ..	201	269	220	216	2,341	3,406	3,029	2,664
Union of South Africa ..	4,941	879	11,491	6,477	49,412	8,798	114,914	69,048
Other British Countries ..	..	..	5,152	1,941	..	..	51,528	26,964
Egypt ..	4,198	9,999	1,684	7,204	41,986	99,997	16,841	77,371
Iran (Persia) ..	271	..	..	..	2,707	..	..	..
Iraq ..	165	..	..	7,957	1,696	..	..	85,783
Other Foreign Countries ..	29	57	..	..	291	1,000	..	..
Total ..	34,036	27,618	27,713	31,520	337,758	282,577	286,230	379,614
Number of Sleepers '000	1,268	903	836	1,186				

3. Classification of Imports and Exports.—(i) *General*. The quantities of timber according to varieties imported and exported during the year 1941-42 are given in the following table :—

## TIMBER : VARIETIES IMPORTED AND EXPORTED FROM AUSTRALIA, QUANTITIES, 1941-42.

Description.	Unit of Quantity.	Imports.	Exports.	Excess of Imports over Exports.
Dressed .. ..	Sup. ft.	3,020,931	380,543	2,640,388
Undressed, including logs ..	"	60,699,972	19,453,269	41,246,703
Sleepers .. ..	"	(a)	31,519,669	- 31,519,669
Architraves, mouldings, etc. ..	Lin. ft.	..	10,089	- 10,089
Plywood, veneered or otherwise ..	Sq. ft.	..	8,203,913	- 8,203,913
Palings .. ..	No.	..	23,840	- 23,840
Shingles .. ..	"	..	..	..
Staves—				
Dressed, etc. .. ..	"	113,621	..	113,621
Undressed .. ..	"	77,005	..	77,005
Laths—				
For blinds .. ..	"	..	..	..
Other .. ..	"	..	..	..
Doors .. ..	"	..	(b)	(b)
Wood pulp .. ..	Ton	(c) 41,422	(a)	(c) 41,422
Veneers .. ..	Sq. ft.	3,931,894	5,678,198	- 1,746,304
Spokes, rims, felloes, etc. ..	No.	..	(b)	(b)
Other .. ..	"	(b)	(b)	(b)

(a) Not recorded separately. (b) Quantity not available. (c) Excludes wood pulp—mechanical.

NOTE.—The minus sign (—) denotes an excess of exports.

# SANDALWOOD EXPORTS.

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Similar particulars relative to the values of imports and exports during the year 1941-42 are shown hereunder:—

## TIMBER : VARIETIES IMPORTED AND EXPORTED FROM AUSTRALIA, VALUES, 1941-42.

Description.	Imports.	Exports.	Excess of Imports over Exports.
	£A.	£A.	£A.
Dressed .. .. .	55,361	10,118	45,243
Undressed, including logs .. .. .	600,788	332,242	268,546
Sleepers .. .. .	(a)	379,614	— 379,614
Architraves, mouldings, etc. .. .. .	..	122	— 122
Plywood, veneered or otherwise .. .. .	..	102,555	— 102,555
Palings .. .. .	..	286	— 286
Shingles .. .. .	..	..	..
Staves—			
Dressed, etc. .. .. .	6,123	..	6,123
Undressed .. .. .	7,673	..	7,673
Laths—			
For blinds .. .. .	..	..	..
Other .. .. .	..	..	..
Doors .. .. .	..	2,102	— 2,102
Wood pulp .. .. .	(b)1,067,443	(a)	1,067,443
Veneers .. .. .	31,142	34,012	— 2,870
Spokes, rims, felloes, etc. .. .. .	..	1,054	— 1,054
Other.. .. .	10,969	..	10,969
Total .. .. .	1,779,499	862,105	917,394

(a) Not recorded separately.

(b) Includes wood pulp—mechanical, £161,581.

NOTE.—The minus sign (—) denotes an excess of exports.

(ii) *Sandalwood.* A considerable quantity of sandalwood is exported, principally from Western Australia to Hong Kong and China, where it is highly prized and largely used for artistic and ceremonial purposes. Particulars for the last four years are as follows:—

## SANDALWOOD : EXPORTS FROM AUSTRALIA.

Country to which Exported.	Quantity.				Value.			
	1938-39.	1939-40.	1940-41.	1941-42.	1938-39.	1939-40.	1940-41.	1941-42.
	Tons.	Tons.	Tons.	Tons.	£A.	£A.	£A.	£A.
Hong Kong .. .. .	806	1,040	474	522	18,709	35,898	16,732	18,642
India .. .. .	25	30	25	..	842	1,290	1,125	..
Malaya (British) .. .. .	97	160	396	42	3,149	6,340	14,015	1,949
Other British Countries .. .. .	17	8	11	25	545	352	495	1,104
China .. .. .	686	226	784	171	18,511	8,134	28,956	1,577
Other Foreign Countries .. .. .	17	8	8	..	574	360	360	..
Total .. .. .	1,648	1,472	1,698	760	42,330	52,374	61,683	23,272

(iii) *Tan Bark.* Tan bark figures both as an export and an import in the Australian trade returns. The following table refers to exports for the four years ended 1941-42 :—

#### TAN BARK : EXPORTS FROM AUSTRALIA.

Country to which Exported.	Quantity.				Value.			
	1938-39.	1939-40.	1940-41.	1941-42.	1938-39.	1939-40.	1940-41.	1941-42.
	Cwt.	Cwt.	Cwt.	Cwt.	£A.	£A.	£A.	£A.
United Kingdom .. ..	..	..	..	..	..	..	..	..
New Zealand .. ..	7,620	3,145	618	421	3,897	1,884	318	236
Other British Countries ..	40	..	18	..	27	..	20	..
Germany .. ..	8,251	..	..	..	3,582	..	..	..
Other Foreign Countries ..	2,309	740	..	..	1,124	460	..	..
<b>Total .. ..</b>	<b>18,220</b>	<b>3,885</b>	<b>636</b>	<b>421</b>	<b>8,630</b>	<b>2,344</b>	<b>338</b>	<b>236</b>

For a number of years prior to 1927-28 Australia had to import large quantities of tanning bark, but thereafter imports dropped to negligible quantities and exports rose annually to 89,061 cwt. in 1931-32. Since 1931-32 there has been a diminution of exports and by 1941-42 these had reached the low level of 421 cwt. The quantity imported did not rise appreciably until 1939-40 when imports were more than three times that of the previous year. Since that year there has been a considerable excess of imports. The Union of South Africa is the chief source of supply.

A comparison of the imports and exports of tan bark during the last five years is given in the following table :—

#### TAN BARK : IMPORTS AND EXPORTS, AUSTRALIA.

Particulars.	1937-38.	1938-39.	1939-40.	1940-41.	1941-42.
<b>QUANTITIES—</b>	<b>Cwt.</b>	<b>Cwt.</b>	<b>Cwt.</b>	<b>Cwt.</b>	<b>Cwt.</b>
Imports .. ..	7,361	6,199	21,981	14,063	50,370
Exports .. ..	15,355	18,220	3,885	636	421
Excess of exports over imports	7,994	12,021	-18,096	-13,427	-49,949
<b>VALUES—</b>	<b>£A.</b>	<b>£A.</b>	<b>£A.</b>	<b>£A.</b>	<b>£A.</b>
Imports .. ..	3,145	2,548	10,141	7,737	26,328
Exports .. ..	7,572	8,630	2,344	338	236
Excess of exports over imports	4,427	6,082	-7,797	-7,399	-26,092

NOTE.—The minus sign (—) denotes an excess of imports.

The imports consist almost exclusively of wattle bark from the plantations in South Africa. One species of Australian wattle, *Acacia mollissima*, is chiefly relied upon for the production of wattle bark in the South African plantations. Seed has been tried from New South Wales, Tasmania and Victoria, but it is stated that most of the seed is obtained from the best wattle bark areas in eastern Tasmania and western Victoria.

Two reasons are given to account for the success of the industry in the Union of South Africa :—(a) It is found that the treeless, grassy highlands of Natal are specially suitable for wattle culture, and the trees can therefore be grown in rows and economically attended to, while the necessary bark sheds and other appurtenances can be placed in the most advantageous positions; and (b) there is an abundance of cheap and efficient native labour.

(iv) *Other Tanning Substances.* Considerable quantities of tanning substances other than bark are annually imported into Australia. The total value in Australian currency of the importations in 1941-42 was £293,470, and was composed as follows :—Tanners' Bates, £2,703; wattle bark extract, £239,110; quebracho extract, £2,570; other extract, £34,305; and valonia, myrobalans, cutch, etc., £14,782.

Exports of tanning extracts from Australia amounted to £58,591 in 1941-42.



## CHAPTER XXV.

## FISHERIES.

## § 1. General.

1. **Fish Stocks.**—Australia possesses a varied native fauna of freshwater and marine fish, including tropical and temperate species. In addition certain exotic species have become acclimatized in the freshwater streams. The commercial fisheries exploit on-shore, demersal (bottom) and pelagic (surface) stocks. The on-shore stocks are at present of greatest importance.

The Australian marine fauna includes also a number of mollusca (oysters, scallops) and crustacea (crabs, prawns, crayfish) groups which are commercially exploited.

At certain times of the year whales of various species appear off our coasts.

2. **Fishing Areas.**—The principal fishing areas at present are the coastal lakes, streams, estuaries and beaches, from Cairns in Queensland to Ceduna in South Australia and from Esperance to Geraldton in Western Australia. There are interruptions of variable size; for the most part, these fishing grounds are associated with the coastal streams. The demersal grounds fall into two classes—(a) the reefs from which cod and other tropical species are taken in tropical waters, and snapper in temperate waters; and (b) the grounds from which flathead, morwong, etc., are taken. The reefs extend intermittently from northern Queensland around the southern part of the continent to Shark's Bay in Western Australia. The flathead grounds lie on the continental shelf off south-east Australia, chiefly from off Crowdy Head to south of Cape Everard and further off the east Tasmanian coast off Babel Island southwards to Storm Bay. Other demersal grounds are known to exist in the Great Australian Bight but as yet are not exploited. The demersal shark grounds lie principally in Bass Strait and on the continental shelf off eastern South Australia. Other grounds have been located off southern Western Australia.

The grounds of existing pelagic fisheries include that for the spanish mackerel off the north-eastern coast from about Coff's Harbour to Cairns and that for barracouta in Bass Strait and off eastern Tasmania. Horse-mackerel is found in the eastern Tasmanian waters. Concentrations of other pelagic groups, including tuna and clupeoid species, are reported over the continental shelf at various points.

The pearl oyster inhabits the northern and western coastal waters from Cape York to Shark Bay. Edible oysters are found in the temperate waters of Queensland, New South Wales and Victoria. Some cropping of natural resources takes place in Queensland but the principal cultivation grounds are found in New South Wales. The scallop is found commercially only in Tasmanian waters.

Crabs (of various species) are found in practically all coastal waters. Prawns are taken in the temperate waters of Queensland and New South Wales. Crayfish are taken on reefs (of the continental shelf) in the waters of all southern States, the fishery extending (with a major interruption in the Bight) from Port Macquarie in New South Wales to Geraldton in Western Australia.

The whale appearances occur off the south of the continent, extending as far north as Southern Queensland in the east and to beyond Shark's Bay in the west.

3. **Fishing Boats and Equipment.**—The fishing equipment includes almost every possible type of gear, and appropriate boats are employed. The on-shore equipment includes mesh-nets, trawl-nets, and traps of various types. The demersal reef-fishery is worked with traps, hand lines and other long lines. The demersal flathead-fishery is worked by both otter trawl (with V.-D. gear) and Danish seine, in addition some hand-lining is carried out. The demersal shark fishery is worked by long lines. The pelagic mackerel-fishery employs trolling gear with lures of various types; while the pelagic barracouta fishery employs barless jigs; the use of nets, chiefly of pursing kind, for pelagic fisheries is only now being tested.

The boats for the on-shore fisheries are almost universally small vessels fitted with low power petrol engines. The vessels working the reefs are larger (up to 50 feet) and have more power. The otter trawl vessels are steam trawlers, while the Danish seine vessels are 40 to 70 feet in length with diesel engines. The shark boats have diesel power and range from 35 to 50 feet in length.

4. **Administration.**—The fisheries at present are administered by State Departments implementing State laws. This administration includes licensing of men and boats, and restriction on fishing, by prohibitions against fishing at certain times and places and by certain methods. In some States the quantity, type and construction of gear is subject to limitations and legal minimum sizes are prescribed.

Since June, 1943, the fisheries have been subject to overall control by the Controller of Fisheries in the Department of War Organization of Industry. This control sets targets of production and co-ordinates government action towards the industry.

Special legislation exists for the pearl-shell and bêche-de-mer fisheries and for whaling.

## § 2. Development and Present Condition of the Fishery.

1. **Fisheries Proper.**—(i) *General.* The earliest Australian fishery was on-shore. To this was soon added the demersal reef fishery using lines. At each centre of population this sequence has almost invariably been followed, and expansion of the industry up to about the year 1900 consisted chiefly of the extension of these operations into hitherto unworked areas. The taking of barracouta in Tasmanian waters was begun at least by 1880, if not earlier, but the main development of this fishery occurred between 1915 and 1925.

The first major development of the fishery came with the institution of trawling operations off the New South Wales coast in 1918 by the New South Wales Government as a consequence of the results obtained from the exploratory work of the Federal Investigation ship *Endeavour*. The State enterprise failed but the fishery was found very profitable by private enterprise, which had as many as sixteen steam trawlers operating at one time. In 1936 the use of Danish seine vessels began and the fleet of these vessels rapidly expanded, being given an exceptional opportunity by the requisitioning of the steam trawlers by the Navy. Subsequently, practically all the Danish seine vessels were also requisitioned. There are strong signs that the stocks here were overfished and that the upper limit of economic production is about 14 million lb.

In about 1929–30 Queensland fishermen turned their attention to spanish mackerel, and this fishery rapidly developed, with Townsville as principal centre. Production in 1942 was in the region of 1 million lb.

At about the same time (1930) a fishery for snapper shark in southern waters began to expand. This fishery rapidly extended its area of operations and the catch increased from 23,131 lb. in 1930 to 1,691,599 lb. in 1941. Greater impetus was given to the fishery during war years by the demand for livers for fish oil production for medicinal purposes. This production has risen from 3,750 gallons in 1940–41 to 15,250 gallons in 1943–44.

The presence of stocks of tuna of various species in Australian waters is undoubted, but, despite extensive experiments, no ready practicable method of taking them has yet been found. However, it appears, following experimental work, that another pelagic species, the horse-mackerel of Tasmania, can be taken by purse seine nets and will be taken in appreciable quantities within the next few years.

(ii) *Production 1942.* Production in this year was, in most cases, moderate or low, the catch in South Australia and Western Australia being low, that of the other States only moderate. This was due to effects of the war and to natural fluctuation. The catch of barracouta was high in Tasmania but low in Victoria; in New South Wales the on-shore catch was high but the trawl catch was low owing to the requisitioning of vessels by the Services.

2. **Oysters and Shell Fisheries.**—Initially the Australian oyster fisheries depended solely upon the harvesting of naturally grown stock in littoral and submarine areas. However, the stocks soon deteriorated and attention was turned to methods of cultivation.

These have not been successful in Queensland, but in New South Wales there has been constant improvement in methods and the present technique in certain areas is highly efficient. Peak production of 44,723 bags was reached in 1938.

The cray fisheries have developed along with the other reef fisheries.

3. **Pearl-shell and Bêche-de-mer.**—Pearl-shelling is carried on in the tropical waters of Queensland, the Northern Territory and Western Australia. The pearl oyster inhabits the northern and western coastal waters from Cape York to Shark Bay, a length of shore of over 2,000 miles. The shells are marketed in considerable quantities, and pearls are obtained in Queensland, Western Australia and the Northern Territory. The fishing is generally conducted with the aid of diving apparatus in water varying from 4 to 20 fathoms in depth. In Queensland and the Northern Territory the bêche-de-mer industry is carried on, and tortoise-shell is obtained on the coasts. Experiments have been made in cultivating the pearl oyster on suitable banks. The value of trochus-shell of Australian origin exported during 1942-43 was £33,558.

### § 3. Marketing and Distribution.

1. **Marketing.**—The greater proportion of Australian fish is sold in metropolitan markets, but some is sold in metropolitan areas without passing through the market. The proportion of local and inland sales varies in different States, being estimated at about 50 per cent. in Queensland and about 10 per cent. in New South Wales; this proportion is dependent upon the degree of concentration of population and on facilities for efficient transport of fish. Marketing in Queensland is subject to a Marketing Act whereby marketing areas may be declared after which all fish caught and sold in the area must be sold at the Government market; at present only a Brisbane marketing area has been declared. A similar Act exists in New South Wales and has so far been implemented only for the Newcastle area. There is some interstate trade in supplies: some fish from northern New South Wales passes to Queensland and some southern New South Wales fish passes to Victoria. New South Wales derives a small quantity of high grade fish from Queensland and barracouta and crayfish from Tasmania. Victoria receives fish from New South Wales, Tasmania and South Australia, the latter being chiefly whiting.

2. **Consumption of Fish.**—In peace years Australians consume annually the equivalent of about 145 million lb. of round fish, that is about 20.7 lb. per person per year. Of this about 65 million lb. is produced locally and the remainder is imported; that is, the average Australian eats about 9.3 lb. of Australian fish a year and the equivalent of 11.4 lb. of overseas fish. This is to be compared with the per capita consumption in the United Kingdom in 1937, of 49.8 lb., with 23.8 lb. in New Zealand and with 110 lb. in Japan.

The low consumption of fish in Australia is due partly to the abundance of food available from the soil, partly to climatic and transport problems of distribution, and in part to problems of production and the difficulties of expansion, which include strong seasonal fluctuations and the absence of certain special types of fish. The latter two factors operate to engender an instability of demand so that fish is regarded as an item of luxury or as a welcome change of diet rather than as a staple item of food.

3. **Processing, including Canning.**—The equipment for handling fish has been somewhat inadequate, but rapid advances are being made in the provision of this equipment, particularly of snap-freezing plant.

There is no considerable trade in smoking, salting or other light processing but plans are being laid for kippering Tasmanian horse-mackerel.

Apart from some establishments which may be engaged in the canning of fish as a subsidiary to that of meat and fruit, fish canneries have been established at various places in Australia with varying results. The industry has not developed, however, and the cause has been attributed to either faulty location, failure of supply or failure to ensure a sound market.

Canneries of southern New South Wales have temporarily ceased operation, due, in the main, to lack of raw material supplies. Some new canneries have been established or are planned.



4. **By-Products.**—Processing of offal for meals, etc., has been established in certain States. The processing of livers for vitamin rich oils has been undertaken in three establishments in southern States and oil-production has been favourably developed.

### § 4. Inquiries and Research.

1. **General.**—Australian fishing industries have been the subject of very numerous inquiries seeking explanation of the very slow rate of development, of the unfortunate conditions prevailing within the industry and of the paucity of supplies available to the public. To meet the situation revealed, various research programmes have been instituted.

2. **Conference 1927–1929.**—With the object of reviewing the potentialities of the fishing industry of Australia the Development and Migration Commission convened a meeting of State and Commonwealth representatives. The Conference, which was held in Melbourne during September, 1927, affirmed :—

- (1) The importance of establishing a Marine Biological Institution to study the scientific problems connected with Australian fisheries, and to collect and disseminate authoritative information and give advice on matters concerning the fisheries;
- (2) The desirability of establishing an experimental trawling unit to explore the fisheries resources of Australia.

Committees were formed to deal with important problems concerning the preservation, transportation, marketing and distribution of fish, the canning and curing of fish, the production of fish by-products, the factors of destruction in fisheries, the development of the oyster industry, etc. The reports prepared by these Committees were submitted to a further conference held in July, 1929, at which the Commonwealth and all State Governments were represented; it was then unanimously recommended that investigation work should be undertaken by the Commonwealth Government.

3. **Council for Scientific and Industrial Research, Division of Fisheries.**—Acting on the recommendation of the 1927–1929 Conference the Commonwealth Government entrusted to the Council for Scientific and Industrial Research the task indicated by the Conference. In its original plans the Council provided a sum of £80,000, spread over a period of five years, for the following purposes :—(i) to procure a vessel specially designed for the exploration of pelagic or surface-swimming fish, but which could also carry out certain investigations of demersal or bottom-dwelling species; (ii) to undertake experiments in the canning of fish and the determination of the chemical composition of fish thought to be suitable for the manufacture of fish by-products; (iii) to determine, by tests, the best methods of curing and preserving fish, especially the more common varieties; and (iv) in co-operation with the State authorities, to undertake a study of the systems of distribution of fish in each State with a view to improving existing transport and marketing facilities. A research vessel constructed at a cost of £17,000 was commissioned in 1938 and a programme of work was laid down extending over a period of five years. During the first three years the investigation was confined to the south-eastern portion of the Australian coast; part of the work was extended later to the south-western portion of the Continent. Experimental cruises completed so far have revealed the presence of eleven kinds of tuna and other commercial species such as pilchard. A Fisheries Laboratory and Research Station has been erected at Port Hacking in New South Wales.

The results of the first five years work have led the Council to place this programme on a permanent basis, and the Division will continue its work of exploration and biological assay of the stocks.

4. **Tariff Board Inquiry.**—The Tariff Board after an inquiry held in 1941, concluded that the development of a prosperous fishing industry would be an important contribution to the war effort, that the possibilities of commercial exploitation were established, and that the stage had now been reached when additional governmental assistance was desirable. It recommended that assistance to the Council for Scientific and Industrial Research be continued and that a Commonwealth Fisheries Development Authority be established with the necessary authority to carry out its functions.

5. **War-time Control.**—A conference between representatives of the Council for Scientific and Industrial Research and State Departments administering fisheries was held in October, 1941, for the purpose of inquiring into the constitution of the proposed Commonwealth Authority and other related matters.

No action arose from this Conference. In 1942 the Division of Fisheries, Council for Scientific and Industrial Research, prepared on behalf of the Director-General of Man Power, a register of man-power in the industry and made suggestions for the rationalization of the industry under war-time conditions. As a result of these suggestions a Controller of Fisheries was appointed in the Department of War Organization of Industry to co-ordinate and organize the industry. The programme of the Controller includes the setting of production goals, control of the allocation of man-power, fuel and equipment, organization of co-operatives within the industry, rationalization of marketing and distribution and general supervision of development.

6. **Pearl-shell Fishery Royal Commission.**—In accordance with the "White Australia" policy it was originally determined that the employment of Asiatic labour in the pearl-shelling industry should be restricted, and ultimately cease, and it was proposed that after 31st December, 1913, permits to bring in Asiatics for the pearling fleet should no longer be issued. In view, however, of the disorganization of the industry occasioned by the war of 1914-19, the time was extended to the 30th June, 1918, after which date permits to introduce Asiatic labour were to be granted only in cases where the diver and tender of a boat were Europeans. The Royal Commission appointed in March, 1912, presented its final report in 1916. The Commissioners stated that, though it might be practicable, they did not consider it advisable or profitable to attempt to transfer the industry from Asiatics to Europeans. They further stated that, while the labour employed is almost entirely Asiatic, they did not consider that the "White Australia" policy would be weakened or imperilled by allowing the industry to continue as then conducted.

7. **Pearl-shell Fishery Tariff Board Inquiry.**—Arising out of an application for the payment of a bounty on pearl-shell gathered by fishing vessels registered in Australia, the industry was the subject of an inquiry by the Tariff Board which presented its report in 1935. The Board did not approve the granting of a bounty but recommended some relief to the industry in the form of the remission of primage and customs duty.

## § 5. The Fishing Industry.

1. **Boats and Men Engaged, and Take.**—(i) *General Fisheries.* The returns have been compiled from particulars supplied by the State Departments, and while the data do not generally lend themselves to presentation on a uniform basis, the principal facts are shown in the following tables:—

### GENERAL FISHERIES, 1942-43.

State or Territory.	No. of Boats Engaged.	Value of Boats and Equip-ment.	No. of Men Engaged.	Total Take of—		Gross Value of Take—	
				Fish.	Spiny Lobster (Crayfish).	Fish.	Spiny Lobster (Crayfish).
	No.	£	No.	Cwt.	Doz.	£	£
New South Wales..	1,691	194,183	(b) 3,128	194,317	9,218	725,451	135,785
Victoria..	994	172,935	1,682	101,680	2,508	481,532	4,307
Queensland ..	1,102	99,636	2,036	67,815	(d) 14,639	263,441	(e) 28,728
South Australia(a)	1,485	178,400	1,912	44,250	27,600	285,300	25,300
Western Australia(a)	339	46,280	680	21,859	18,938	114,000	(f) 12,355
Tasmania(g)	485	85,000	668	37,626	56,773	50,569	21,300
Northern Territory	(h)	(h)	(h)	(h)	(h)	(h)	(h)
Total ..	6,156	776,434	10,106	467,547	129,676	1,920,293	227,775

(a) Year ended December, 1942.

(d) Crabs.

and £40, the value of 53 turtles.

(g) Includes oyster fisheries.

(b) Fishermen's licences issued.

(e) Includes £12,111, the value of 1,200 cwt. of prawns;

(f) Includes £2,905 the value of 200 cwt. of prawns and 6,599 dozen crabs.

(h) Not available.

Returns for Australia for the last five years are given in the table below :—

### GENERAL FISHERIES : AUSTRALIA.

Particulars.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
No. of boats engaged .. ..	5,462	5,556	6,229	5,530	6,156
No. of men engaged .. ..	9,081	8,836	9,806	9,526	10,106
Fish obtained—					
Quantity .. .. cwt.	612,735	625,209	576,928	534,339	467,547
Gross value .. .. £	1,385,281	1,370,599	1,448,952	1,679,284	1,920,293
Lobsters obtained—Gross value £	134,866	155,874	144,368	170,354	227,775

(ii) *Edible Oyster Fisheries.* Edible oyster fisheries are of small dimensions outside New South Wales and Queensland. During 1942-43 the available returns show the following takes :—New South Wales, 72,577 cwt., value £145,146 ; Queensland, 6,265 cwt., value £9,819. In Tasmania the scallop is far more important than the oyster. In 1942-43 the scallops taken in Tasmania were valued at £14,583.

Returns for Australia for the last five years are given in the following table :—

### EDIBLE OYSTER FISHERIES : AUSTRALIA.

Particulars.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
Boats engaged .. No.	754	791	768	855	715
Men engaged .. ..	850	875	1,021	837	728
Oysters obtained—					
Quantity .. .. cwt.	89,145	82,312	86,463	88,949	79,885
Gross value (a) .. .. £	132,201	129,946	136,150	139,142	171,754

(a) Includes scallops in Tasmania valued at £14,500 in 1938 ; £13,650 in 1939 ; £14,000 in 1940 ; £18,600 in 1941 ; and £14,583 in 1942-43.

(iii) *Pearls, Pearl-shell and Bêche-de-mer—States.* The latest available particulars of the equipment used and production are shown in the following table. As details for Western Australia for the year 1941 are available they are appended to the table :—

### PEARL, PEARL-SHELL AND BÊCHE-DE-MER FISHERIES, (a) 1940-41.

State or Territory.	Number of Boats Engaged.	Value of boats and Equipment.	Number of Men Engaged.	Pearl-shell.		Gross Value of Pearls obtained. (b)	Gross Value of Bêche-de-mer obtained.	Gross Value of Tortoise-shell obtained.
				Quantity obtained.	Gross Value.			
Queensland (c) ..	No. 88	£ 95,036	No. 924	Tons. 1,187	£ 160,335	£ ..	£ 6,890	£ 6
Western Australia (d) ..	65	55,981	536	700	73,903	1,584	24	15
Northern Territory (f) ..	9	5,000	80	131	11,434	..	..	..
Australia ..	162	156,017	1,540	2,018	245,672	1,584	6,914	21
Western Australia 1941 (g) ..	57	55,398	487	616	96,127	2,360	..	..

(a) No pearl-shelling industry in New South Wales, Victoria, South Australia and Tasmania.  
 (b) Incomplete : as returned. (c) Also 276 tons of trochus-shell valued at £19,286. (d) Year ended December, 1940. (e) Also 3 cwt. trochus-shell valued at £10. (f) Year 1939-40.  
 (g) Queensland and Northern Territory not available for 1941-42.



(iv) *Australia.* The figures for tortoise-shell and trochus-shell are incomplete, as the necessary information is not collected in full detail. In the following summary of production during the last five years export figures of Australian origin are inserted for both of these items :—

### PEARL, PEARL-SHELL AND BÊCHE-DE-MER FISHERIES : AUSTRALIA.

Particulars.			1936-37.	1937-38.	1938-39.	1939-40.	1940-41.
Boats engaged ..	No.		221	204	181	167	162
Men engaged ..	"		2,241	1,941	1,750	1,408	1,540
Pearl-shell obtained—							
Quantity ..	tons		2,780	2,854	2,543	2,149	2,018
Value ..	£		340,244	310,655	222,281	198,264	245,672
Value of—							
Pearls obtained (a) ..	£		5,495	4,111	3,397	2,620	1,584
Bêche-de-mer obtained	£		6,495	14,237	8,145	669	6,914
Tortoise-shell exported	£		367	380	151	205	138
Trochus-shell exported	£		51,209	32,147	34,166	37,704	6,791

(a) Incomplete ; as returned.

2. *Value of Production—Gross and Local.*—(i) *General.* As the outcome of a series of conferences by Australian Statisticians it is now possible to present the value of production of the fishing industry on a more satisfactory basis than was possible hitherto. It should be remembered, however, that the actual collection of statistics of the quantity of fish taken presents many difficulties and the gross values are not complete in some of the States. Particulars of the value of other materials used in the process of production are not available for all States, and consequently the values can only be stated at the point of production and not on a net basis as has been done with other industries. Variations in the relative proportions of marketing costs to gross production suggest that complete uniformity in method has not yet been attained.

### GROSS AND LOCAL VALUE OF FISHERIES PRODUCTION, 1942-43.

State.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Place of Production.	Value of other Materials used in process of Production.	Net Value of Production.(a)
	£	£	£	£	£
New South Wales ..	1,006,000	176,000	830,000	12,000	818,000
Victoria ..	453,429	71,128	382,301	(b)	(b)
Queensland ..	302,000	60,000	242,000	60,000	182,000
South Australia ..	312,230	35,216	277,014	(b)	(b)
Western Australia ..	127,355	10,153	117,202	18,645	98,557
Tasmania ..	86,450	..	86,450	(b)	(b)
Total ..	(c)2,287,464	352,497	1,934,967	(b)	(b)

(a) No deduction has been made for depreciation and maintenance.

(b) Not available.

(c) Excludes production in the Northern Territory.

(ii) *States 1933-34 to 1942-43.* In the following table the local value of fisheries production and the local value per head of population are given by States for each year since 1933-34. Local value is gross value less marketing costs and is the value at the

place of production. The value of materials used in the course of production is not available for all States and consequently production is valued at that point. These values therefore overstate the net values by the extent of these costs.

### LOCAL VALUE OF FISHERIES PRODUCTION.

Year.	N.S.W.	Vic.	Qld.	S.A.	W. A.	Tas.	Total.
LOCAL VALUE.(a)							
	£	£	£	£	£	£	£
1933-34 ..	536,000	132,452	248,375	152,041	195,985	72,080	1,336,933
1934-35 ..	536,000	140,549	261,411	151,843	181,913	71,300	1,343,016
1935-36 ..	583,000	146,946	287,000	151,800	179,405	71,040	1,419,191
1936-37 ..	650,000	161,999	336,000	184,669	224,432	80,900	1,638,000
1937-38 ..	548,000	168,095	296,000	209,234	286,580	87,050	1,594,959
1938-39 ..	620,000	176,919	277,000	220,401	269,894	90,350	1,654,564
1939-40 ..	508,000	199,632	285,000	202,009	252,837	109,910	1,557,388
1940-41 ..	517,000	244,444	330,000	227,987	251,529	96,830	1,667,790
1941-42 ..	619,000	387,462	185,000	245,301	226,945	109,570	1,773,278
1942-43 ..	830,000	382,301	242,000	277,014	117,202	86,450	1,934,967

### LOCAL VALUE PER HEAD OF MEAN POPULATION.

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1933-34 ..	4 1	1 5	5 3	5 3	8 11	6 4	4 0
1934-35 ..	4 1	1 6	5 5	5 2	8 3	6 3	4 0
1935-36 ..	4 5	1 7	5 11	5 2	8 0	6 2	4 3
1936-37 ..	4 9	1 9	6 10	6 3	9 11	7 0	4 10
1937-38 ..	4 0	1 10	5 11	7 1	12 6	7 5	4 8
1938-39 ..	4 6	1 11	5 6	7 5	11 8	7 8	4 9
1939-40 ..	3 8	2 1	5 7	6 9	10 10	9 2	4 5
1940-41 ..	3 9	2 7	6 4	7 7	10 8	8 0	4 9
1941-42 ..	4 5	4 0	3 7	8 1	9 8	9 2	5 0
1942-43 ..	5 11	3 11	4 8	9 0	4 11	7 2	5 5

(a) No deduction has been made for depreciation and maintenance.

3. Fish Preserving.—To encourage the industry the Federal Parliament provided a bounty of  $\frac{1}{2}$ d. per lb. for fish preserved as prescribed during the ten years 1907-8 to 1916-17, but the bounty failed to develop the industry, and was not renewed on its expiration in 1916-17. The amount of bounty paid during the ten years was only £3,005.

4. State Revenue from Fisheries.—The revenue from fisheries in each State during the year 1942-43 is given hereunder :—

### FISHERIES : REVENUE, 1942-43.

State or Territory.	Licences.	Leases.	Fines and Forfeitures.	Other Sources.	Total.
	£	£	£	£	£
New South Wales ..	3,763	11,320	298	357	15,738
Victoria ..	1,340	84	194	95	1,713
Queensland ..	2,657	1,813	211	35	4,716
South Australia (a) ..	1,427	..	35	35	1,497
Western Australia (a) ..	713	..	90	122	925
Tasmania ..	687	..	..	269	956
Northern Territory(b) ..	..	..	..	..	..
Total ..	10,587	13,217	828	913	25,545

(a) Year ended December, 1942.

(b) Not available.

Similar particulars for Australia for the last five years are given in the following table:—

## FISHERIES : REVENUE, AUSTRALIA.

Particulars.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	£	£	£	£	£
Licences .. ..	15,563	12,182	12,254	11,855	10,587
Leases .. ..	12,446	10,716	11,480	10,281	13,217
Fines and Forfeitures .. ..	1,397	1,364	1,496	1,695	828
Other Sources .. ..	4,867	1,054	1,138	593	913
Total .. ..	34,273	25,316	26,368	24,424	25,545

## § 6. Oversea Trade in Fishery Products.

1. Imports of Fish.—The large importations of fish and fish products made each year give further evidence of the need to develop the fishing industry of Australia. Imports for the last five years were as follows:—

## FISH AND FISH PRODUCTS : IMPORTS INTO AUSTRALIA.

Classification.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
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## QUANTITY.

Fish—	cwt.	cwt.	cwt.	cwt.	cwt.
Fresh or preserved by cold process .. ..	83,393	68,177	55,471	33,114	21,162
Potted or concentrated .. ..	9,435	7,300	1,304	115	..
Preserved in Tins—					
Herrings .. ..	38,917	32,800	9,677	5,572	6,453
Salmon .. ..	166,695	147,125	117,429	29,214	45,188
Sardines .. ..	29,372	29,019	15,595	181	..
Other .. ..	14,306	6,897	6,442	3,684	43,786
Crustaceans .. ..	6,829	7,677	461	459	150
Oysters .. ..	1,939	2,159	2,060	1,587	862
Smoked or dried (not salted) .. ..	8,122	5,474	2,111	2,069	..
Other .. ..	7,987	3,441	1,522	487	1,149
Oysters in the shell .. ..	635	1,049	315	245	400

## VALUE IN AUSTRALIAN CURRENCY.

Fish—	£A.	£A.	£A.	£A.	£A.
Fresh or preserved by cold process .. ..	273,289	247,577	213,328	154,120	112,801
Potted or concentrated .. ..	122,250	102,918	16,316	1,179	1
Preserved in Tins—					
Herrings .. ..	138,391	118,256	35,060	24,856	4,078
Salmon .. ..	716,164	677,685	593,032	189,064	375,290
Sardines .. ..	182,336	181,396	78,676	529	1
Other .. ..	63,996	34,124	45,379	49,055	266,884
Crustaceans .. ..	70,328	71,225	5,837	4,980	2,303
Oysters .. ..	13,995	17,611	18,503	13,973	7,832
Smoked or dried (not salted) .. ..	23,603	17,633	8,106	8,674	..
Other .. ..	10,948	10,307	8,047	3,104	9,669
Oysters in the shell .. ..	704	1,068	537	317	279
Total .. ..	1,616,004	1,479,800	1,022,821	449,851	779,138



Tinned fish constitutes by far the largest proportion of the imports ; salmon from Canada and the United States of America ; herrings from Canada and the United Kingdom and sardines from Norway were the chief varieties imported. The potted fish comes chiefly from the United Kingdom and New Zealand, which also supplied a considerable proportion of the fresh fish imported in 1942-43 ; the bulk of the remainder came from the Union of South Africa. The small import of oysters is supplied by New Zealand, which has also furnished the bulk of the crustaceans imported in recent years.

2. **Exports of Fish.**—The exports of fish are comparatively insignificant. During 1942-43 they were as follows :—Fresh or preserved by cold process, 77 cwt., £603 ; oysters, fresh, 1 cwt., £10 ; potted or concentrated, £8,641 ; preserved in tins, 7,224 cwt., £44,278 ; smoked or dried, 3 cwt., £28 ; other including salted, 283 cwt., £2,869.

3. **Exports of Pearl and other Shell.**—The exports of pearl, tortoise and trochus-shell of Australian origin are given hereunder for the five years ended 1942-43 :—

**PEARL, TORTOISE AND TROCHUS-SHELL : EXPORTS FROM AUSTRALIA.**

Article.		1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
Pearl-shell ..	cwt.	52,532	48,581	37,024	36,846	645
	£	244,266	224,646	196,263	252,766	7,525
Tortoise-shell ..	cwt.	4	6	3	..	..
	£	151	205	138	..	..
Trochus-shell ..	cwt.	9,108	12,905	2,332	9,977	6,779
	£	34,166	37,704	6,791	36,807	33,558

All the pearl-shell and trochus-shell exported during 1942-43 was consigned to the United States of America.

## CHAPTER XXVI.

### WATER CONSERVATION AND IRRIGATION.

#### § 1. Artesian Water.

1. **General.**—In every country subject to droughts, the provision of adequate systems of water conservation is a matter of prime importance. Much has been done in Australia so far as the supply of water to centres of population is concerned, and a description of the principal water-works in each State will be found in Chapter XVIII. "Local Government".

Interstate conferences on the subject of artesian water were held in 1912, 1914, 1921, 1924 and 1928, when combined Governmental action was agreed upon with reference to delimitation of the artesian basins, hydrographic surveys, reason for decrease in flow, analyses and utilization of artesian water, etc. A map showing the extent of the known artesian basins appears on pp. 885-6.

2. **The Great Australian Artesian Basin.**—The area known as the "Great Australian Artesian Basin" includes (a) considerably more than one-half of Queensland, taking in practically all that State lying west of the Great Dividing Range, except an area in the north-west contiguous to the Northern Territory; (b) a considerable strip of New South Wales along its northern boundary and west of the Great Dividing Range; and (c) the north-eastern part of South Australia, together with the extreme south-eastern corner of the Northern Territory. This basin (shown approximately by the map on pp. 885-6) is said to be the largest yet discovered, and measures about 600,000 square miles, of which 376,000 are in Queensland, 118,000 in South Australia, 80,000 in New South Wales, and 25,000 in the Northern Territory. The area of the intake beds is estimated at 60,010 square miles, comprising 50,000 in Queensland and 10,010 in New South Wales. A description of the basin and its geological formation appears in previous issues of the Official Year Book (see No. 6, p. 569).

3. **The Western Australian Basins.**—The Western Australian Basins fall naturally within five distinct groups, namely, the Eucla Basin, in the extreme south-east of the State, extending well into South Australia along the shores of the Great Australian Bight; the Coastal Plain Basin, west of the Darling Range; the North-West Basin, between the Murchison and Ashburton Rivers; the Gulf Basin, between Cambridge Gulf and Queen's Channel; and the Desert Basin, between the De Grey and Fitzroy Rivers.

The Recent and Tertiary strata which enter Western Australia at its eastern border, and which have a prevailing dip towards the Great Australian Bight, form the Eucla artesian water area. Where boring operations have been undertaken, the water has been found to be salt or brackish, and there are other conditions affecting the supply, such as local variation in the thickness of the beds, their relative porosity, and the unevenness of the floor upon which they rest, which so far have not been examined with sufficient thoroughness to enable many particulars to be given in regard to this basin.

In the Coastal Plain Basin to the west of the Darling Ranges, artesian boring has, on the other hand, been carried on successfully for many years.

4. **The Murray River Basin.**—The Murray River Basin extends over south-western New South Wales, north-western Victoria, and south-eastern South Australia. It is bounded on the west by the azoic and palæozoic rocks of the Mount Lofty and other ranges extending northwards from near the mouth of the Murray to the Barrier Range, and on the east and north-east by the ranges of Victoria and New South Wales. This tertiary water-basin is occupied by a succession of sedimentary formations, both porous and impervious. The waters of the Murray River are partly supplied by influx from the water-bearing beds of this basin; this is proved by the fact that, at low water, springs are observed at certain places flowing into the river bed from beneath the limestone cliffs from Pyap Bend downwards. Similar springs exist along the courses of other branches of the River Murray system, where they cut through the tertiary formation. On the Victorian side, bores have been put down, and water has been struck at various levels.

5. **Plutonic or Meteoric Waters.**—In previous issues of the Official Year Book will be found a statement of the theory of Professor Gregory\* as to the origin of the water in the Australian artesian basins, together with the objections held thereto by a former Government Geologist of New South Wales† (see Official Year Book No. 6, p. 570).

6. **Artesian and Sub-Artesian Bores.**—(i) *General.* The following table gives particulars regarding artesian and sub-artesian bores in each State and in the Northern Territory. As a result of the war-time conditions the collection of data relating to artesian bores has been discontinued since 1939-40:—

ARTESIAN AND SUB-ARTESIAN BORES, 1939-40.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust. (a)	W. Aust.	N. Terr.	Australia. (b)
Bores existing .. No.	763	330	6,514	162	284	191	8,244
Total depth of existing bores .. '000 feet	(c) 1,167	11	3,099	116	231	63	4,687
Daily flow .. '000 gals.	(d) 68,653	3,000	260,000	12,972	(e)	7,723	352,348
Depth at which artesian water was struck—							
Maximum .. feet	4,338	3,000	6,000	4,851	4,006	1,760	6,000
Minimum .. "	100	50	10	233	30	42	10
Temperature of flow—							
Maximum .. °Fahr.	141	160	212	208	(e)	(e)	212
Minimum .. "	75	10	78	82	(e)	(e)	10

(a) Government bores only. (b) Incomplete. (c) Total depth of all bores. (d) Flowing bores only. (e) Not available.

(ii) *Details for States.*—Considerations of space preclude the insertion of separate particulars of operations in the States during 1939-40. Details for earlier years appear in issues of the Official Year Book prior to No. 23, 1930.

## § 2. Irrigation.

1. **General.**—Australia's first experiments in irrigation were made with the object of bringing under cultivation areas in which an inadequate rainfall rendered agricultural and even pastoral occupations precarious and intermittent, and, although these original settlements have generally proved fairly successful, most of the States, instead of promoting new settlement in unoccupied regions, are adopting the policy of making existing settlements closer, by repurchasing large estates, sub-dividing them into holdings of suitable sizes for cultivation, and selling the land upon easy terms of payments. It is in connexion with this Closer Settlement policy that the special value of irrigation is recognized. Information regarding the various irrigation schemes in operation is given in some detail in preceding issues of the Official Year Book (see No. 23, pp. 637-61).

\* See J. W. Gregory, F.R.S., D.Sc.: "The Dead Heart of Australia," London, John Murray, 1906; and "The Flowing Wells of Central Australia," Geogr. Journal, July and August, 1911.

† E. F. Pittman, A.R.S.M., formerly Government Geologist of New South Wales: "Problems of the Artesian Water Supply of Australia, with special reference to Professor Gregory's Theory." (Clarke Memorial Lecture, delivered before the Royal Society of New South Wales, 31st October, 1907); "The Great Australian Artesian Basin," Sydney, 1914; and "The Composition and Porosity of the Intake Beds of the Great Australian Artesian Basin," Sydney, 1915.



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2. **Areas Irrigated.**—The following table gives the areas irrigated in each State during the years 1931-32 to 1941-42. The area shown for New South Wales refers only to crops irrigated. It does not include pasture land and fallow land which may have been irrigated and consequently the area is not strictly comparable with that shown for other States.

## IRRIGATION : AREAS IRRIGATED.

Season.	N.S.W. (a)	Victoria.	Queensland.	S. Aust.	W. Aust.	Tasmania.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1931-32 ..	114,777	418,415	28,414	42,813	6,104	7,768	618,291
1932-33 ..	130,977	474,716	31,409	42,556	6,434	7,605	693,697
1933-34 ..	131,772	435,324	29,363	42,898	7,040	9,194	656,191
1934-35 ..	125,423	494,226	34,138	39,594	8,861	7,786	(b)710,054
1935-36 ..	138,016	495,835	44,283	42,672	11,396	8,987	(b)741,312
1936-37 ..	151,683	518,827	44,509	42,292	13,295	9,987	(b)780,663
1937-38 ..	170,719	590,112	49,154	44,250	14,284	8,428	(b)876,953
1938-39 ..	183,518	515,357	48,953	43,602	14,278	8,599	(b)814,357
1939-40 ..	120,753	517,903	55,153	44,470	15,443	8,656	(b)762,641
1940-41 ..	158,337	596,662	60,961	46,268	14,513	8,821	(b)885,953
1941-42 ..	(c)	602,074	(c)	45,757	15,060	6,975	(c)

(a) Excludes pasture and fallow lands.

(b) Includes Australian Capital Territory, 1934-35, 26 acres; 1935-36, 123 acres; 1936-37, 70 acres; 1937-38, 6 acres; 1938-39, 50 acres; 1939-40, 263 acres; 1940-41, 391 acres; and 1941-42, 48 acres.

(c) Not available.

3. **Crops on Irrigated Areas.**—A classification of the crops grown on irrigated areas in each State during 1940-41 will be found in the next table. Lucerne, grasses and green fodder accounted for 33 per cent., cereals for 25 per cent., orchards and vineyards for 27 per cent., and root crops, market-gardens, etc., for 15 per cent. of the total area of crops under irrigation in 1940-41. The area in Victoria does not include 352,556 acres of pasture land which were irrigated in 1940-41. Likewise 6,270 acres of pasture land are also omitted from the Tasmanian figures for the same year.

With the development of irrigation, rice growing was introduced into the Murrumbidgee Irrigation Area about 1924-25, and with the increased demand due to the occupation by Japan of the rice-producing countries north of Australia the area of this crop has been greatly increased and extended to the Wakool Irrigation Area. For further particulars see § 8, Chapter XXII.

## IRRIGATION : CROPS ON IRRIGATED AREAS, 1940-41.

Crop.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total. (a)
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Cereals ..	77,461	53,499	413	..	..	..	131,373
Lucerne, Grasses and Green Fodder ..	40,018	105,809	8,063	(b) 10,173	8,824	67	173,255
Orchards and Vineyards ..	29,568	72,403	10,207	29,590	2,218	961	144,947
Root Crops, Market-gardens and other Crops ..	11,290	12,395	(c)42,278	6,505	3,471	(d)1,523	77,552
Total ..	158,337	244,106	60,961	46,268	14,513	2,551	527,127

(a) Includes 391 acres Australian Capital Territory as follows :—Green Fodder, 301 acres ; and Market-gardens, 90 acres. (b) Includes pasture land. (c) Includes Sugar-cane, 39,768 acres ; Cotton, 1,066 acres ; and Tobacco, 1,430 acres. (d) Includes Hops, 967 acres



## CHAPTER XXVII.

## MISCELLANEOUS.

## § 1. Patents, Trade Marks and Designs.

1. Patents.—(i) *General*. The granting of patents is regulated by the Commonwealth Patents Act 1903–1935, which, in regard to principle and practice, has the same general foundation as the Imperial Statutes, modified to suit Australian conditions. The Act is administered by a Commissioner of Patents. Fees totalling £10 are sufficient to obtain letters patent for the Commonwealth of Australia and the Territories of Papua, New Guinea and Norfolk Island. Renewal fees are payable as follows :—£1 before the expiration of the fifth year and an amount progressively increasing by ten shillings before the expiration of each subsequent year up to the fifteenth, when the fee becomes £6. If a renewal fee is not paid when it becomes due, an extension of time up to twelve months may be granted on grounds specified in the Act, and subject to the payment of prescribed fees.

(ii) *Summary*. The number of separate inventions in respect of which applications were filed during the years 1939 to 1943 is given in the following table, which also shows the number of letters patent sealed in each year :—

## PATENTS : AUSTRALIA.

Particulars.	1939.	1940.	1941.	1942.	1943.
No. of applications .. .. .	5,740	4,438	4,060	3,793	4,604
No. of applications accompanied by provisional specifications .. ..	3,161	2,784	2,363	2,164	2,242
Letters patent sealed during each year	3,141	2,480	2,127	1,795	1,424

(iii) *Revenue*. The revenue of the Commonwealth Patent Office during the years 1939 to 1943 is shown hereunder :—

## PATENTS : REVENUE, AUSTRALIA.

Particulars.	1939.	1940.	1941.	1942.	1943.
	£	£	£	£	£
Fees collected under Patents Act .. .. .	45,581	40,651	40,949	44,951	46,852
Receipts from publications	1,828	1,429	1,022	1,046	1,184
Total .. .. .	47,409	42,080	41,971	45,997	48,036

2. Trade Marks and Designs.—(i) *Trade Marks*. Under the Trade Marks Act 1905 the Commissioner of Patents is also Registrar of Trade Marks. This Act has been amended from time to time, the last amendment having been made in 1936. Special provisions for the registration of a “Commonwealth Trade Mark” are contained in the Act of 1905, and are applicable to all goods included in or specified by a resolution passed by both Houses of Parliament that the conditions as to remuneration of labour in connexion with the manufacture of such goods are fair and reasonable.

(ii) *Designs.* The Designs Act 1906, as amended by the Patents, Designs and Trade Marks Act 1910 and the Designs Acts 1912, 1932, 1933 and 1934, is now cited as the Designs Act 1906-1934. Under this Act a Commonwealth Designs Office has been established, and the Commissioner of Patents appointed "Registrar of Designs".

(iii) *Summary.* The following table shows the applications for trade marks and designs received and registered during the years 1939 to 1943 :—

## TRADE MARKS AND DESIGNS : AUSTRALIA.

Applications.			1939.	1940.	1941.	1942.	1943.
RECEIVED.							
Trade Marks	..	..	1,992	1,618	1,360	837	1,227
Designs	..	..	865	605	479	221	322
REGISTERED.							
Trade Marks	..	..	1,580	1,209	1,218	925	788
Designs	..	..	736	567	381	199	103

(iv) *Revenue.* The revenue of the Trade Marks and Designs Office during the years 1939 to 1943 is given hereunder :—

## TRADE MARKS AND DESIGNS : REVENUE, AUSTRALIA.

Particulars.	1939.			1940.			1941.			1942.			1943.		
	Trade Marks.	Designs.	Publications.	Trade Marks.	Designs.	Publications.	Trade Marks.	Designs.	Publications.	Trade Marks.	Designs.	Publications.	Trade Marks.	Designs.	Publications.
	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
Fees collected under Commonwealth Acts ..	15,951	1,082	19	13,660	885	10	9,475	723	18	9,304	690	17	8,806	812	19

No fees in respect of Trade Marks have been collected under State Acts since 1922.

## § 2. Copyright.

1. *Legislation.*—Copyright is regulated by the Commonwealth Copyright Act 1912-1935 wherein, subject to modifications relating to procedure and remedies, the British Copyright Act of 1911 has been adopted and scheduled to the Australian law.

Reciprocal protection of unpublished works was extended in 1918 to citizens of Australia and of the United States of America under which copyright may be secured in the latter country by registration at the Library of Congress, Washington. The Commonwealth Government promulgated a further Order in Council which came into operation on 1st February, 1923, and extended the provisions of the Copyright Act to the foreign countries of the Copyright Union, subject to the observance of the conditions contained therein.

2. **Applications and Registrations.**—The following table shows under the various headings the number of applications for copyright received and registered, and the revenue obtained for the years 1939 to 1943 :—

**COPYRIGHT : AUSTRALIA.**

Particulars.	1939.	1940.	1941.	1942.	1943.
Applications received—					
Literary .. .. .	1,438	1,507	1,486	1,095	1,202
Artistic .. .. .	53	45	57	24	29
International .. ..	3	1	..	..	..
Applications registered—					
Literary .. .. .	1,359	1,371	1,429	856	1,140
Artistic .. .. .	38	29	51	15	76
International .. ..	1	1	..	..	..
Revenue .. .. . £	411	397	386	283	310

### § 3. Local Option and Reduction of Licences.

Local option concerning the sale of fermented and spirituous liquors is in force in South Australia and Tasmania. In Victoria, Queensland and Western Australia State-wide polls have superseded the local polls, while in New South Wales the taking of local option polls has been suspended since 1913, though a special State-wide referendum was taken in 1928 on the question of State-wide prohibition with compensation. At the poll held in Victoria on 8th October, 1938, the voting was as follows :—

For abolition of licences .. .. .	368,676
Against abolition of licences .. .. .	721,704
Informal .. .. .	7,648

The percentage of electors who voted was 95.38.

In all States other than South Australia a maximum number is established above which licences shall not be increased except under certain specified conditions (the principal case being the greater demand for service of a considerably increased population). Licences Reduction Boards are in operation in New South Wales and Victoria and in all other States machinery exists for the reduction of licences where it seems desirable or where there is a local option vote in favour of the reduction of licences.

In earlier issues of the Official Year Book (see No. 22, pp. 1005–8), details, by States, were published of polls taken and of the operations of the Licences Reduction Boards.

### § 4. Lord Howe Island.

Lord Howe Island is situated in latitude 31° 30' south, longitude 159° 5' east, about 436 miles north-east of Sydney, and has an area of 3,220 acres. The climate is mild and the rainfall abundant, but on account of the rocky formation of its surface only about 300 acres are suitable for cultivation, most of which are devoted to the production of Kentia Palm Seed. The land belongs to the Crown and is occupied rent-free on sufferance.

Discovered in 1788, the Island was first settled by a small party of Maoris in 1853 ; afterwards a colony was settled from Sydney. Constitutionally the Island is a dependency of New South Wales and is included in King, one of the electorates of Sydney. A Board of Control at Sydney manages the affairs of the Island and supervises the palm seed industry. The population was 161 at the Census of 30th June, 1933, and 150 at 31st December, 1941.



## § 5. Commonwealth Council for Scientific and Industrial Research.

1. **General.**—By the Science and Industry Research Act 1920–1939, the previously existing Commonwealth Institute of Science and Industry was reorganized under the title of the Council for Scientific and Industrial Research. An account of the organization and work of the former Institute was given in earlier issues of the Official Year Book. (See No. 18, p. 1062.)

2. **Science and Industry Research Act 1920–1939.**—This Act provides for a Council, consisting of—

- (a) Three members nominated by the Commonwealth Government ;
- (b) the Chairman and Vice-Chairman of each State Committee constituted under the Act ; and
- (c) such other members as the Council, with the consent of the Minister, co-opts by reason of their scientific knowledge.

The three Commonwealth nominees form an Executive Committee which may exercise, between meetings of the Council, all the powers and functions of the Council, of which the principal are as follows :—(a) To initiate and carry out scientific researches in connexion with primary or secondary industries in Australia ; (b) to train research workers and to establish industrial research studentships and fellowships ; (c) to make grants in aid of pure scientific research ; (d) to establish industrial research associations in any industries ; (e) to test and standardize scientific apparatus and instruments ; (f) to establish a Bureau of Information ; and (g) to act as a means of liaison between Australia and other countries in matters of scientific research.

State Committees, whose main function is to advise the Council as to matters that may affect their respective States, have been constituted in accordance with prescribed regulations.

3. **Science and Industry Endowment Act 1926.**—Under this Act, the Government established a fund of £100,000, the income from which is used to provide assistance (a) to persons engaged in scientific research ; and (b) in the training of students in scientific research. Provision is made for gifts or bequests to be made to the fund, which is controlled by a trust consisting of the three Commonwealth nominees on the Council. In accordance with the Act, arrangements have been made to send a number of qualified graduates abroad for training in special fields of work.

4. **Work of the Council.**—The full Council held its first meeting in June, 1926, and has since met at about half-yearly intervals. It has adopted a policy of placing each of its major fields of related researches under the direction of an officer having a standing at least as high as, if not higher than, that of a University Professor.

The main branches of work of the Council are (i) plant problems, (ii) soil problems, (iii) entomological problems, (iv) animal health and nutrition problems, (v) forest products, (vi) food preservation and transport, (vii) fisheries, (viii) physical standards, (ix) aeronautics, (x) industrial chemistry, (xi) radio research, (xii) lubricants and bearings, (xiii) dairy research, (xiv) biometrics, and (xv) mineragraphic investigations and ore-dressing. Successful results have been obtained in many directions, particularly in regard to bitter pit in apples, spotted wilt in tomatoes, water blister of pineapples, blue mould of tobacco, the cultivation of vegetables and medicinal plants, the cultivation and drying of vine fruits, the cultivation of citrus fruits, contagious pleuropneumonia of cattle, the feeding of sheep for increased wool production, black disease, infectious enterotoxæmia, pulpy kidney and caseous lymphadenitis of sheep, internal parasites, coast disease of sheep, soil surveys, paper-making from Australian timbers, timber seasoning and preservation, the preservation and transport of bananas, oranges, chilled beef and other foodstuffs, the dehydration of meat and vegetables, the preparation of canned fruit juices, processes for the production of essential chemicals previously imported, the production of agar and fish oils and the utilization of fish offal. During the early years of its existence, the work of the Council was directed almost exclusively to the solution of problems affecting primary industries. In 1938, however, the Commonwealth Government provided funds to enable the Council to extend its activities to the field of secondary industrial research. For that purpose a National

Standards Laboratory has been established in Sydney and an Aeronautical Research Laboratory in Melbourne. A Division of Industrial Chemistry has also been formed; its central laboratory is being erected in Melbourne. An Information Section has been established at the Council's Head Offices, Melbourne; it specializes in bibliographical searches of literature and the provision of photostat copies of articles and translations. Practically all the Council's activities are now directed to the solution of problems arising out of the war and to assistance and advice to various Government Departments and other institutions which are concerned with the war effort. More detailed information concerning the past work of the Council appeared in Official Year Book, No. 22, p. 1009.

## § 6. Australian Institute of Anatomy.

1. *Foundation of Institute.*—The Australian Institute of Anatomy, situated in Canberra, occupies a monumental building erected by the Commonwealth Government under the Zoological Museum Agreement Act of 1924. Prior to the passing of this Act, the Commonwealth Government had expressed regret that the Australian Nation possessed neither a collection of specimens of the unique and fast disappearing fauna of Australia, nor a Museum in which such specimens could be preserved for future generations. Comparative anatomy is the basis of medical science, and while the importance of a study of Australian animals in the solution of various medical problems had for years been recognized by other countries and steps taken by them to procure specimens for their museums, national effort in this direction was neglected in Australia. The late Sir Colin MacKenzie, the first Director of the Institute of Anatomy, however, very kindly presented to the Commonwealth Government his entire private collection, and this magnificent gift was acquired and provision was made for its proper housing under special legislation by the Commonwealth Government. In 1931 the Institute became an integral part of the Commonwealth Department of Health.

2. *Additions to Original Collection.*—In addition to the original collection, which has been greatly augmented, the following gifts have been made to the Australian Nation, and are on view in the Institute:—

- (1) *Horne-Bowie Collection.*—Dealing with the life of Central Australian aborigines and throwing valuable light on the psychology of this Stone Age people.
- (2) *Burrell Collection.*—This deals with the life history of the platypus, and is unique in the world. The platypus is the most primitive mammal known to science, and is the link between the bird, the reptile and the mammal.
- (3) *Milne Collection.*—This is an anthropological and ethnological collection dealing with the aborigines of New South Wales, and contains many valuable and now unobtainable native weapons and implements.
- (4) *Murray Black Collection* of anatomical material representative of the aborigines of Southern Victoria and the River Murray.
- (5) *Nankivell Collection*, illustrating the anatomy of the aborigines of the Murray Valley.
- (6) *Harvard University Collection.*—This includes a collection of specimens from the Harvard University, U.S.A., representing a carefully worked out epitome of archaeology of the United States of America, and, together with two rare skeletons of primitive North American Indians, was a goodwill gift from the University to the Institute of Anatomy.
- (7) *The Sir Hubert Murray Collection.*—The ethnological and osteological collection of the late Sir Hubert Murray, formerly Lieutenant-Governor of Papua. This deals especially with the anthropology of Papua.
- (8) *The Rabaul Ethnological Collection.*—This concerns chiefly the ethnology of the Mandated Territory of New Guinea.
- (9) *The Basedow Collection.*—This collection has been recently purchased by the Commonwealth Government. It deals especially with the anthropology of Central and Northern Australia and was assembled, after many years of research, by the late Dr. Herbert Basedow of Adelaide, who was formerly Protector of Aborigines.

- (10) Many hundreds of specimens and books received from numerous interested scientists, the most outstanding being those from Mr. E. Hill, of Nagambie, Victoria; Mrs. Harry Burrell, New South Wales; and medical books for the Library from the estates of the late Drs. Molloy, David Grant and Robert Stirling.

3. **Endowments for Orations and Lectures.**—In addition to the aforementioned donations of material, there have been several endowments for Orations and Lectures as follows:—

- (1) *The Halford Oration.*—Endowed with a gift of £1,000 by the family of the late Professor G. B. Halford, founder of the first medical school in the Southern Hemisphere. The interest on this amount is given to a prominent scientist to deliver an oration on a subject suggested by the life and work of the late Professor G. B. Halford.
- (2) *The Anne MacKenzie Oration.*—Founded with a gift of £1,000 by the late Sir Colin MacKenzie, in memory of his mother. The orator receives the annual interest for delivering an oration on any phase of "Preventive Medicine".
- (3) *The Dr. G. E. Morrison Memorial Lecture on Ethnology.*—Founded by Chinese residents in Australia, in memory of a great Australian who rendered important services to China.
- (4) *The Kendall Lecture in Veterinary Science.*—Endowed by the sons of the late Dr. W. T. Kendall, who was the founder of the first Veterinary School in the Southern Hemisphere.
- (5) *The Charles Mackay Lecture on Medical History.*—Endowed by Miss C MacKenzie with a gift of £607 as a memorial to her grandfather, an educationalist, who arrived in Melbourne in 1852 and died at Kilmore, Victoria.
- (6) *The Cilento Medal.*—This bronze medal has been endowed in perpetuity by Sir Raphael Cilento, Director-General of Health for Queensland, to be awarded annually to the scientist deemed to have accomplished the best practical work for the furtherance of Tropical Hygiene and Native Welfare in Australia.

4. **The Scope of the Institute.**—The building occupies portion of the site which has been reserved for the National University of Australia.

The Institute consists of two separate and distinct entities. Portion of the original collection of anatomical specimens assembled by the late Sir Colin MacKenzie is arranged in two large museums which are open to the general public. The material in these museums has been arranged so as to present simple lessons in human hygiene as well as to display the anatomical features and especially the peculiarities of Australian fauna.

The remainder of the building is devoted to research work where scientific investigations have been carried out in many branches of science. The large collections of bony anatomical material donated by Murray Black have provided most interesting and valuable data on aboriginal diseases. These have been studied in some detail.

In order to provide a reservoir of koalas upon which observations of their peculiar food habits might be made, a small reservation has been acquired, and fenced, about 40 miles from Canberra. In this area abounds the peculiar gum tree on which the Victorian koala feeds. This reservation has already been stocked with koalas from Victoria. Later other animals will be added.

In 1938, following upon the retirement due to ill-health of Sir Colin MacKenzie, the activities of the Institute were extended to interpret more fully the ideas of the founder. In the later years of his life Sir Colin had been keenly interested in the relationship of nutrition to the development of the child. When a section for the study of child growth and development was established by the Commonwealth Department of Health in 1938 the head-quarters were transferred to the Institute.

The section devoted to the study of nutrition has been considerably enlarged and many important problems relating to nutrition of the Australian people have been studied.



### § 7. The Commonwealth Solar Observatory.

1. **Reasons for Foundation.**—The primary purpose of the Observatory is the prosecution of scientific research, especially astrophysical research. At the same time the Observatory undertakes a number of routine observations which have proved of practical value to the nation.

2. **History of Inauguration.**—A short account of the steps leading up to the establishment of the Observatory appears in Official Year Book No. 19, p. 979.

3. **Site of the Observatory.**—The site selected for the observatory is on Mount Stromlo, a ridge of hills about 7 miles west of Canberra. The highest point is 2,560 feet above sea level, or about 700 feet above the general level of the Australian Capital City.

4. **Equipment.**—The principal astrophysical equipment of the Observatory consists of a sun telescope including an 18-in. coelostat, and a 30-in. reflecting telescope, the gift of J. H. Reynolds, Esq. Gifts also include a 9-in. refractor presented by the late Mr. James Oddie of Ballarat, and a 6-in. refracting telescope, presented by the Trustees of the late Lord Farnham. In addition, the Observatory is well equipped with special apparatus and has extensive workshop facilities.

5. **Observational Work.**—The observational work includes the following:—(a) solar research and the investigation of related phenomena; (b) astrophysical research including stellar spectroscopy; (c) positional astronomy including observations of the places of stars; (d) ionospheric and allied investigations; (e) terrestrial magnetism; and (f) the determination of time by the observation of stars, and the distribution of time signals.

### § 8. Standards Association of Australia.

The Standards Association of Australia is the national standardizing organization of Australia and issues Australian standard specifications for materials and codes of practice.

The Association was established in July, 1929, by the amalgamation of the Australian Commonwealth Engineering Standards Association and the Australian Commonwealth Association of Simplified Practice. It is an independent body in close touch with modern industrial requirements and has the full recognition and support of the Commonwealth and State Governments and industry.

The sole executive authority of the Association is vested in the Council on which industry is fully represented together with official representatives of the Commonwealth and State Governments and their Technical Departments, and of scientific, professional and commercial organizations. Voluntary assistance is rendered in the drafting of specifications and codes by more than 4,500 individuals who are experts in their particular fields and are organized into more than 500 committees. Among these are technical committees on: Agricultural Machinery; Aircraft Materials; Air Raid Precautions; Asbestos Cement Pressure Pipes; Bolts and Nuts; Bore Casing; Building Materials; Camouflage Paints; Cement; Chromium Plating; Coal and Coke; Colliery Equipment; Containers for the Carriage of Liquids; Creosote; Dairy Products; Electrical; Electrical Approvals; Fibrous Plaster Products; Galvanized Products; Heavy Textiles; Identification of Piping Systems; Joiners' Glue; Linen Thread; Locomotive and Railway Rolling Stock; Machine Belting; Marine Plywood; Metal Window Frames; Non-Ferrous Metals; Oil Filters for Motor Vehicles; Paint and Varnish; Pipes and Plumbing; Producer Gas for Motor Vehicles; Quality Control; Railway Permanent Way Materials; Road Materials; Road Making Machinery; Ropes and Cordage; Safety Glass; Scientific Glassware; Shafting, Gearing and Transmission; Structural Steel; Sugar Mill Machinery; Sulphur Dioxide; Steel Plate, Sheet and Strip; Terne Plate; Timber; Tool Steels; Tools and Gauges; Tramway Rails; and Wool Unshrinkability.

The Codes Group includes committees on: Boilers and Unfired Pressure Vessels; Concrete Structures; Cranes and Hoists; Electrical Wiring Rules; Explosives; Fire Protection; Interior Illumination of Buildings; Lift Installations; Pump Tests;

Refrigeration ; Road Signs and Traffic Signals ; Steel Structures ; Street Lighting ; Welding ; Work in Compressed Air ; and X-ray Equipment. Many committees, such as the Conditions of Contract Committee and the Institutional Supplies Committee, come under the Commercial Standards Division.

The specifications of the Association provide a suitable standard of performance, quality and dimension and an equitable basis for tendering. They help to eliminate redundant qualities and sizes. They enable purchasers to obtain their requirements with greater assurance of satisfaction, with more rapid delivery and without the necessity of drafting individual specifications.

The underlying principles covering the preparation of the specifications and codes are that they shall be in accordance with the needs of industry ; that the common interests of producer and consumer be maintained ; that periodical revision should keep the work abreast with progress ; and that standardization be arrived at by general consent without coercion.

Organizations, companies, firms and individuals interested in the work of the Association are eligible for subscription membership. Members are entitled to free copies of the publications of the Association and to the use of the library and its Special Information Service. Research is undertaken for committees, members of the Association, and industry in general. Many hundreds of inquiries were answered during the last year.

The Association has International affiliations and the standards of all British and foreign countries are filed in the library and are accessible to members. It also administers the Australian National Committees of the International Electrotechnical Commission, the World Power Conference and the International Commission on Large Dams.

The Association is also the representative of the British Standards Institution, and all British standards may be purchased from head-quarters and branch offices in the various States. British Air Ministry (D.T.D.) specifications are also on sale.

The head-quarters of the Association are at Science House, Gloucester-street, Sydney, and branches of the Association are situated at Temple Court, 422 Collins-street, Melbourne ; Empire Chambers, cr. Queen and Wharf-streets, Brisbane ; Alliance Building, Grenfell-street, Adelaide ; Gledden Building, Hay-street, Perth ; Premier's Department, Murray-street, Hobart ; Department of the Interior, Canberra ; and Howard Smith Chambers, Watt-street, Newcastle.

## § 9. Valuation of Australian Production.

**1. Net Value of Production.**—(i) *Australia.* The value of production for Australia is computed in accordance with the decisions reached by the Conference of Australian Statisticians and principally by the Conference held in 1935. The figures published below have been compiled by the State Statisticians. The adoption of substantially uniform methods of valuing production and of estimating elements of costs of production and marketing render the results comparable as between States.

Attention is directed to the fact that the value shown in the table refers only to recorded production and excludes the building and construction industry, those industrial establishments not classified as factories, and agricultural and farmyard produce obtained from areas of less than one acre.

The following is a brief explanation of the terms used in the table :—

- (a) "Gross value" is the value placed on gross production at the wholesale price realized in the principal markets. (In cases where primary products are consumed at the place of production or where they become raw material for a secondary industry, these points of consumption are presumed to be the principal markets.)
- (b) "Local value" is the gross production valued at the place of production and is ascertained by deducting marketing costs from the gross value. (Marketing costs include freight, cost of containers, commission and other charges incidental thereto.)

- (c) "Net value" represents the net return to the producer after deducting from the gross value costs of marketing and of materials used in the process of production. Materials used in the process of production include seed, power, power kerosene, petrol and other oils, fodder consumed by farm stock, manures, dips, sprays and other costs. No deduction has been made for depreciation and maintenance costs. This matter is more fully dealt with in *Production Bulletin* No. 36, Part II., issued by this Bureau.

It should be noted that maintenance costs of farm buildings and fences have not been deducted from the value of production of rural industries, as particulars are not available for all States. In addition there is an overstatement in the net value of production for New South Wales by the inclusion of power costs in rural industries. These costs which amounted to £1,900,000 in 1940-41 were not collected in 1942-43. The value shown for Mines and Quarries in Tasmania is understated owing to the omission of Quarries. This understatement, however, is more or less offset by the inclusion of production costs in Mining. As explained in the note (b) below, production costs are not available for all States in respect of Fisheries, and Local Values have been used for this industry with consequent overstatement.

Tables showing the total and *per capita* value of production are published, by States, for each of the ten years ended 1942-43. The tables will be found in the chapter dealing with each industry with the exception of Trapping.

### GROSS, LOCAL AND NET VALUE OF RECORDED PRODUCTION : AUSTRALIA, 1942-43.

Industry.	Gross Production valued at Principal Markets.	Local Value— Gross Production valued at place of Production.	Net Value of Production (without deduction of depreciation or maintenance).
	£	£	£
Agriculture .. ..	111,305,317	95,691,218	76,788,224
Pastoral .. ..	115,892,152	105,764,739	101,014,176
Dairying .. ..	53,711,832	50,583,657	42,243,919
Poultry .. ..	17,272,745	15,644,440	11,154,018
Bee-farming .. ..	363,431	323,325	323,325
<b>Total Rural (a) ..</b>	<b>298,545,477</b>	<b>268,007,379</b>	<b>231,523,662</b>
Trapping .. ..	3,820,544	3,549,992	3,549,992
Forestry .. ..	12,638,907	11,319,157	11,013,245
Fisheries .. ..	2,287,464	1,934,967	(b)1,934,967
Mines and Quarries..	37,746,256	37,308,202	30,766,798
<b>Total Non-rural ..</b>	<b>56,493,171</b>	<b>54,112,318</b>	<b>47,265,002</b>
<b>Total All Primary ..</b>	<b>355,038,648</b>	<b>322,119,697</b>	<b>278,788,664</b>
<b>Factories .. ..</b>	<b>(c)352,001,424</b>	<b>(c)352,001,424</b>	<b>(c)352,001,424</b>
<b>Total All Industries ..</b>	<b>707,040,072</b>	<b>674,121,121</b>	<b>630,790,088</b>

(a) The term "Rural" is used to cover those industries ordinarily considered to be farm industries.  
 (b) Local value. Production costs not available for all States. (c) Net value.



(ii) *States.* The net value of production in each State is shown hereunder :—

## NET (a) VALUE OF RECORDED PRODUCTION IN STATES, 1942-43.

Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
Agriculture ..	23,548	19,026	15,416	10,316	4,956	3,526	76,788
Pastoral ..	38,212	24,767	22,011	7,132	6,684	2,209	101,015
Dairying ..	13,825	12,466	10,671	2,962	1,718	602	42,244
Poultry ..	3,392	5,238	576	750	674	524	11,154
Bee-farming ..	40	130	10	111	30	2	323
<b>Total Rural (net)</b>	<b>79,017</b>	<b>61,627</b>	<b>48,684</b>	<b>21,271</b>	<b>14,062</b>	<b>6,863</b>	<b>231,524</b>
Trapping ..	1,534	1,462	64	108	87	295	3,550
Forestry ..	3,155	2,282	2,328	1,011	1,423	814	11,013
Fisheries (local) ..	830	382	242	277	117	87	1,935
Mines and Quarries	12,897	1,884	3,352	2,950	7,144	2,540	30,767
<b>Total Non-rural (local and net)</b>	<b>18,416</b>	<b>6,010</b>	<b>5,986</b>	<b>4,346</b>	<b>8,771</b>	<b>3,736</b>	<b>47,265</b>
<b>Total All Primary</b> ..	<b>97,433</b>	<b>67,637</b>	<b>54,670</b>	<b>25,617</b>	<b>22,833</b>	<b>10,599</b>	<b>278,789</b>
<b>Factories ..</b>	<b>153,682</b>	<b>121,380</b>	<b>29,045</b>	<b>28,366</b>	<b>11,453</b>	<b>8,075</b>	<b>352,001</b>
<b>Total All Industries</b> ..	<b>251,115</b>	<b>189,017</b>	<b>83,715</b>	<b>53,983</b>	<b>34,286</b>	<b>18,674</b>	<b>630,790</b>

(a) See letterpress on page 896.

## NET (a) VALUE OF RECORDED PRODUCTION PER HEAD OF MEAN POPULATION, 1942-43.

Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Agriculture ..	8 6 4	9 13 1	14 15 8	16 16 7	10 6 5	14 12 1	10 13 4
Pastoral ..	13 10 0	12 11 4	21 2 1	11 12 9	13 18 4	9 3 0	14 0 7
Dairying ..	4 17 8	6 6 6	10 4 8	4 16 8	3 11 7	2 9 11	5 17 4
Poultry ..	1 4 0	2 13 2	0 11 1	1 4 6	1 8 1	2 3 4	1 11 0
Bee-farming ..	0 0 3	0 1 3	0 0 2	0 3 7	0 1 3	0 0 2	0 0 11
<b>Total Rural (net)</b>	<b>27 18 3</b>	<b>31 5 4</b>	<b>46 13 8</b>	<b>34 14 1</b>	<b>29 5 8</b>	<b>28 8 6</b>	<b>32 3 2</b>
Trapping ..	0 10 10	0 14 10	0 1 3	0 3 7	0 3 7	1 4 6	0 9 10
Forestry ..	1 2 3	1 3 2	2 4 8	1 13 0	2 19 3	3 7 5	1 10 7
Fisheries (local) ..	0 5 11	0 3 11	0 4 8	0 9 0	0 4 11	0 7 2	0 5 5
Mining (net) ..	4 11 1	0 19 1	3 4 2	4 16 3	14 17 6	10 10 5	4 5 6
<b>Total Non-rural (local and net)</b>	<b>6 10 1</b>	<b>3 1 0</b>	<b>5 14 9</b>	<b>7 1 10</b>	<b>18 5 3</b>	<b>15 9 6</b>	<b>6 11 4</b>
<b>Total All Primary</b> (local and net)	<b>34 8 4</b>	<b>34 6 4</b>	<b>52 8 5</b>	<b>41 15 11</b>	<b>47 10 11</b>	<b>43 18 0</b>	<b>38 14 6</b>
<b>Factories ..</b>	<b>54 5 9</b>	<b>61 11 6</b>	<b>27 17 0</b>	<b>46 5 7</b>	<b>23 17 0</b>	<b>33 9 0</b>	<b>48 17 11</b>
<b>Total All Industries</b> ..	<b>88 14 1</b>	<b>95 17 10</b>	<b>80 5 5</b>	<b>88 1 6</b>	<b>71 7 11</b>	<b>77 7 0</b>	<b>87 12 5</b>

(a) See letterpress on page 896.

2. **Productive Activity.**—In the absence of a satisfactory measure of the total *quantity* of recorded production, the retail price index-numbers have been applied to the value of production, in the same manner as they have been applied to nominal wages, to measure their relative purchasing power. The results may be taken to indicate the purchasing power in retail prices of the things produced, and for convenience will hereafter be called *real* production. On account of the discontinuance of the "A" series index-number, it is not possible to continue the measurement on the basis of this series.

Two tables are given:—The first shows *real* production per head of population, but any deductions therefrom must take into account the following considerations. The production considered is material production only, and takes no account of services. As civilization advances, material production becomes less important relatively to services, and a smaller proportion of the population is engaged in such production. For example, the use of the motor car, the cinema and wireless is comparatively recent, and these employ a much larger number of people in services than in material production. Hence, material production per head of population will not measure accurately the progress of productive efficiency, but will tend to give too low a value. Unemployment, of course, will also depress it.

A better measure is afforded by *real* production per person engaged in material production. The second table attempts to give this. The result affords a better measure of productive efficiency, but does not take into account the effect of unemployment, though the index may be somewhat depressed by short time and rationing.

The two tables tell different stories. Before unemployment became severe in 1930 *real* production per head (as shown in the last column of the first table) had remained substantially steady with minor fluctuations since 1906. Whatever gain had been made in productive efficiency had been largely counterbalanced by the gradual change-over from production of goods to production of services. Coincident with the heavy increase in unemployment between the years 1930 and 1933, the maximum being reached in 1932, the index-number fell sharply from its normal level of about 100 to 78 in 1930–31. This would imply a fall in average *real* income of nearly one-fourth from the normal level, taking unemployment into account. Apart from a slight recession in 1934–35 due to a drop in wool values the index-number rose continuously from 1931–32 onwards; the pre-depression level was reached in 1935–36 and the peak of 1924–25 was exceeded in 1937–38. This upward movement was interrupted in 1938–39 but increased during the next four years to a new high level in 1942–43. In 1942–43 as a result of increased activity in all industries, due to the war and the consequent increase in employment the *real* production per head of population was about 8 per cent. above the previous peak recorded in 1939–40.

The index-number of *real* production per person engaged as given in the last column of the second table shows, on the other hand, an appreciable upward tendency. It rose steeply during the War of 1914–19, as might have been expected, fell somewhat after the war and recovered again. In 1929–30, the fall was substantial, due partly to the lag in the fall of retail prices, but it rose during the next four years to 126 only to fall again in 1934–35 to 117 with the drop in wool prices during that year. Most of this loss was recovered in 1935–36 while in 1936–37 it advanced to a new level, at which it was maintained during the following year. In each of the years 1941–42 and 1942–43 new high levels were reached; but in 1938–39, due mainly to lower agricultural production, and in 1940–41, due to a poor season, the *real* production per person engaged was considerably below the level of 1937–38. This figure for *real* production per person engaged implies a high *real* wage for those in *employment* and is consistent with available information concerning rates of *effective* or *real* wages, which more than maintained in recent years the high level reached in the years 1927 to 1929.

The data for the second table are not complete. The number engaged in timber-getting is not accurately known, so that the value of production on this account, and the corresponding persons engaged, are both left out of account. Further, the

information concerning women engaged in primary production is unsatisfactory, and only males are counted in primary industries. In manufacturing, the numbers are converted into equivalent male workers on the basis of relative wages for male and female workers. The column headed "number engaged" is, therefore, rather an index than the absolute number of individuals occupied in material production, but, as an index, it should be accurate enough to give a satisfactory measure of production per person engaged.

## PRODUCTION PER HEAD OF POPULATION: AUSTRALIA.

Year.	Gross Value of Material Production.			Retail Price Index-numbers, 1911 = 1,000.		Real Production per head of population (1911 = 100) measured in purchasing power over regimen of—	
	Total.	Per head of population.		"A" Series.	"C" Series.	"A" Series.	"C" Series.
		Actual.	Index-number, 1911 = 100.				
	£'000.	£					
1906 ..	147,043	35.9	87	902	..	97	..
1911 ..	188,359	41.2	100	1,000	(1,000)	100	100
1913 ..	220,884	45.1	110	1,104	..	99	..
1914 ..	213,552	43.0	104	1,140	1,140	92	92
1916 ..	261,996	53.3	129	1,324	1,319	98	98
1917 ..	279,418	56.1	136	1,318	1,406	103	97
1918 ..	291,875	57.5	140	1,362	1,501	102	93
1919-20 ..	343,697	64.9	158	1,624	1,695	97	93
1920-21 ..	390,644	72.2	175	1,821	1,935	96	91
1921-22 ..	344,426	62.5	152	1,600	1,680	95	90
1922-23 ..	379,445	67.4	163	1,642	1,619	100	101
1923-24 ..	400,276	69.6	169	1,714	1,664	99	102
1924-25 ..	454,580	77.3	188	1,690	1,637	111	115
1925-26 ..	431,670	72.0	175	1,766	1,673	99	104
1926-27 ..	447,354	73.1	178	1,763	1,663	101	107
1927-28 ..	452,901	72.5	176	1,776	1,676	99	105
1928-29 ..	447,805	70.5	171	1,785	1,693	96	101
1929-30 ..	389,537	60.6	147	1,783	1,688	83	87
1930-31 ..	319,706	49.2	120	1,574	1,528	76	78
1931-32 ..	305,018	46.5	113	1,432	1,406	79	80
1932-33 ..	318,224	48.2	117	1,358	1,344	86	87
1933-34 ..	357,218	53.7	130	1,365	1,344	96	97
1934-35 ..	356,349	53.2	129	1,399	1,366	92	95
1935-36 ..	404,770	60.0	146	1,437	1,392	101	105
1936-37 ..	456,745	67.1	163	1,489	1,431	110	114
1937-38 ..	486,914	70.9	172	1,530	1,467	113	117
1938-39 ..	464,993	67.1	163	(a)	1,512	(a)	108
1939-40 ..	527,500	75.4	183	(a)	1,515	(a)	119
1940-41 ..	549,927	78.4	190	(a)	1,634	(a)	117
1941-42 ..	645,662	90.0	219	(a)	1,730	(a)	126
1942-43 ..	715,118	99.3	241	(a)	1,864	(a)	129

(a) Not available.



## PRODUCTION PER PERSON ENGAGED : AUSTRALIA.

Year.		Number engaged in Material Production.(a)	Value of Material Production per person engaged in production.(a)		“ Real ” Production per person engaged (1911 = 100) measured in retail purchasing power over regimen of—	
			Actual.	Index-number. 1911 = 100.	“ A ” Series.	“ C ” Series.
		(’000)	£			
1906 ..	..	659	223	87	96	..
1911 ..	..	728	257	100	100	100
1913 ..	..	756	290	113	102	..
1914 ..	..	733	289	113	99	99
1916 ..	..	685	381	148	112	112
1917 ..	..	683	408	159	120	113
1918 ..	..	685	424	165	121	110
1919-20 ..	..	743	460	179	110	106
1920-21 ..	..	760	510	199	109	103
1921-22 ..	..	775	441	172	107	102
1922-23 ..	..	793	475	185	113	114
1923-24 ..	..	810	491	191	111	115
1924-25 ..	..	826	547	213	126	130
1925-26 ..	..	831	515	201	114	120
1926-27 ..	..	841	527	205	116	123
1927-28 ..	..	838	536	209	118	125
1928-29 ..	..	830	536	209	117	123
1929-30 ..	..	803	482	187	105	110
1930-31 ..	..	728	431	168	108	112
1931-32 ..	..	741	411	160	112	114
1932-33 ..	..	781	407	158	117	118
1933-34 ..	..	815	437	170	125	126
1934-35 ..	..	862	412	160	115	117
1935-36 ..	..	901	448	174	121	125
1936-37 ..	..	930	491	191	128	134
1937-38 ..	..	961	504	196	128	134
1938-39 ..	..	962	481	187	(b)	124
1939-40 ..	..	979	536	209	(b)	135
1940-41 ..	..	1,016	538	210	(b)	128
1941-42 ..	..	1,056	609	237	(b)	137
1942-43 ..	..	1,022	698	272	(b)	146

(a) See explanatory remarks above tables.

(b) Not available.

## § 10. Indexes of Production.

In the tables below, indexes of price and quantity production are given for the following industrial groups, namely :—Agriculture, Pastoral, Farmyard and Dairying, Gold and Other Minerals, and for all groups combined. The method used in calculating these indexes is the fixed base weighted aggregative method. Prices for any year are obtained by dividing value of production by quantity produced in that year, and the price indexes are computed by using as fixed quantity-multipliers, for the commodities

involved, the average quantities produced over the period 1923-24 to 1927-28. For the quantity indexes the multipliers are weighted average prices over the same period, which are obtained by dividing the total value of any commodity for the period by the total quantity produced. Exactly the same method is used for the combined group indexes (i.e., for All Farming and Total) as for the indexes for individual groups.

**PRIMARY PRODUCTION : INDEX-NUMBERS OF PRICES, AVERAGE 1923-24 TO 1927-28 AS BASE (=1,000).**

Year.	Agricultural	Pastoral.	Farmyard and Dairying.	All Farming.	Minerals.		Total Primary.
					Gold.	Other, excluding Gold.	
1911 ..	695	455	597	560	973	482	558
1912 ..	652	537	664	597	973	525	595
1913 ..	641	524	633	581	973	523	580
1914 ..	1,083	591	680	774	973	514	754
1915 ..	753	784	836	782	973	578	767
1916 ..	728	879	881	827	973	674	816
1917 ..	848	960	860	906	973	846	901
1918 ..	1,008	963	950	976	973	832	964
1919-20 ..	1,489	1,010	1,144	1,196	1,170	861	1,167
1920-21 ..	1,285	949	1,452	1,145	1,289	919	1,127
1921-22 ..	981	666	1,008	829	1,215	912	840
1922-23 ..	1,025	880	1,070	960	1,075	905	957
1923-24 ..	902	1,117	1,023	1,028	1,014	931	1,020
1924-25 ..	1,050	1,101	901	1,052	1,066	1,020	1,049
1925-26 ..	1,095	902	1,026	988	973	1,041	992
1926-27 ..	976	866	1,024	929	973	1,044	939
1927-28 ..	977	1,015	1,025	1,004	973	964	1,000
1928-29 ..	884	893	1,043	914	973	933	916
1929-30 ..	829	724	990	803	973	902	813
1930-31 ..	574	571	792	608	973	852	632
1931-32 ..	634	491	712	575	1,372	692	593
1932-33 ..	600	480	636	546	1,672	640	566
1933-34 ..	597	715	625	660	1,768	638	670
1934-35 ..	662	532	674	599	1,748	643	617
1935-36 ..	710	685	742	702	2,006	686	715
1936-37 ..	840	765	794	795	1,984	742	803
1937-38 ..	751	705	865	747	1,990	820	766
1938-39 ..	677	608	905	680	2,019	705	696
1939-40 ..	675	707	911	729	2,228	736	745
1940-41 ..	759	752	876	775	2,442	813	795
1941-42 ..	770	808	919	813	2,448	889	836
1942-43 ..	859	894	1,006	900	2,395	944	919

PRIMARY PRODUCTION : INDEX-NUMBERS OF QUANTITY PRODUCTION,  
AVERAGE 1923-24 TO 1927-28 AS BASE (=1,000).

Year.	Agricultural.	Pastoral.	Farmyard and Dairying.	All Farming.	Minerals.		Total Primary.
					Gold.	Other, excluding Gold.	
1911 ..	611	938	742	794	4,172	1,176	862
1912 ..	775	859	721	808	3,906	1,265	879
1913 ..	807	970	743	878	3,707	1,332	946
1914 ..	359	948	720	709	3,451	1,172	777
1915 ..	1,199	768	570	884	3,270	1,075	925
1916 ..	971	742	701	814	2,798	962	847
1917 ..	805	750	814	779	2,446	936	810
1918 ..	635	849	796	767	2,138	1,000	801
1919-20 ..	527	938	737	765	1,794	717	771
1920-21 ..	1,046	763	809	868	1,585	785	868
1921-22 ..	944	877	955	913	1,273	783	906
1922-23 ..	896	934	872	911	1,269	873	912
1923-24 ..	971	837	886	891	1,196	974	901
1924-25 ..	1,151	977	1,091	1,055	1,135	1,003	1,052
1925-26 ..	880	1,033	1,009	976	939	1,008	979
1926-27 ..	1,090	1,093	971	1,072	876	991	1,063
1927-28 ..	908	1,060	1,043	1,005	854	1,025	1,005
1928-29 ..	1,093	1,133	1,068	1,109	769	899	1,087
1929-30 ..	952	1,067	1,071	1,028	717	852	1,010
1930-31 ..	1,346	1,035	1,175	1,164	784	810	1,130
1931-32 ..	1,211	1,129	1,265	1,179	1,000	665	1,134
1932-33 ..	1,334	1,212	1,350	1,276	1,199	774	1,233
1933-34 ..	1,228	1,160	1,423	1,226	1,394	828	1,194
1934-35 ..	1,066	1,200	1,485	1,200	1,489	883	1,176
1935-36 ..	1,096	1,166	1,415	1,182	1,529	984	1,169
1936-37 ..	1,158	1,206	1,359	1,214	1,981	1,050	1,209
1937-38 ..	1,313	1,260	1,432	1,306	2,320	1,130	1,302
1938-39 ..	1,154	1,211	1,497	1,237	2,674	1,173	1,247
1939-40 ..	1,495	1,322	1,554	1,419	2,764	1,283	1,421
1940-41 ..	824	1,336	1,516	1,189	2,761	1,256	1,212
1941-42 ..	1,276	1,379	1,540	1,370	2,514	1,312	1,377
1942-43 ..	1,197	1,378	1,576	1,348	1,938	1,290	1,349



## § 11. Consumption of Commodities.

1. *Australia*.—The movement in the consumption of commodities is of special interest, indicating, as it does, the presence or absence of a number of important factors in the communal life of Australia. These factors include such items as changes in diet, variations in supply and demand, in purchasing power and in population. It is not possible to measure the influence of each of these changes, but their net effect on consumption is revealed in the figures given.

Increases in the actual quantities consumed, while indicating a greater consumptive capacity for Australia as a whole, do not indicate the trends in consumption. These are recorded in the *per capita* figures. The most pronounced changes over a series of years have taken place in motor spirit, barley, butter, meat, biscuits, flour, maize, potatoes, tea, beer, and spirits. With the development of motor transport the consumption of motor spirit has risen from 2 to almost 50 gallons per head of population between 1913 and 1941. Butter and barley have been consumed in larger quantities during each of the periods shown in the table. The consumption of meat has increased since the war years of 1914-19.

Commodities showing trends in the opposite direction were: biscuits, flour, maize, potatoes, tea, beer and spirits. It should be remembered, however, that the figures for the five years ended 1935-36 were seriously affected by the economic depression and the consequent rise in unemployment, while the figures for the five years ended 1940-41 were affected by the change due to the war.

The following tables furnish a comparison over a long series of years of the average annual total and *per capita* quantities available for consumption in Australia. The data have been compiled by adding to production the excess of imports or subtracting the excess of exports as the case may be. Allowance should be made for stocks at the commencement and at the end of each period, but this was possible only in respect of wheat and flour. In consequence, the figures given for the remaining commodities are somewhat incomplete, but any discrepancy occasioned by this omission is minimized by ranging the consumption over periods of five to seven years.

A few brief notes on some features of the more important commodities are given below:—

*Cereals*.—The quantities shown for cereals represent the amounts available for human consumption as such or in some other consumable form. In addition, they include those quantities consumed by live stock, of which separate details are not available. These quantities, together with the amount required for seed purposes, give the total requirements of Australia.

*Root Crops*.—In arriving at the total quantity available for consumption the output of holdings of less than one acre has been excluded.

*Dairy Produce*.—The quantities of fresh milk consumed by the people of Australia cannot be determined accurately, and the figures are no more than estimates obtained from the best available sources. The quantities of butter and cheese consumed include those produced on farms.

*Meats*.—The accuracy of the figures of meat consumption depends upon the reliability of the average weights applied to the dressed carcasses. These are most difficult to obtain for the whole of Australia and the figures have been compiled from the most reliable estimates available.

*Drink and Tobacco*.—The quantities used in these compilations were those on which excise was paid and those cleared from bond.

*Sugar.*—In determining the consumption of sugar, allowance has been made for the estimated sugar contents of goods exported; these include canned fruit, condensed milk, jam, etc. The quantities shown, therefore, represent those actually available for consumption in Australia.

*Flour.*—The quantities of flour available for consumption include the amounts consumed in bread, cakes, pastry and biscuits; the quantities used by factories in other manufacturing processes are also included.

### CONSUMPTION OF COMMODITIES: ESTIMATE OF ANNUAL REQUIREMENTS. AUSTRALIA.

Commodity.	Unit of Quantity.	Seven years ended 1920-21.	Five years ended—			
			1925-26.	1930-31.	1935-36.	1940-41.
<b>Cereals—</b>						
Barley .. ..	'000 bush.	3,132	3,364	4,343	4,351	6,344
seed requirements .. ..	" "	336	410	499	644	1,093
Maize .. ..	" "	8,324	9,741	8,645	6,961	7,235
seed requirements .. ..	" "	89	90	89	86	100
Oats .. ..	" "	9,271	10,772	9,526	10,927	10,194
seed requirements .. ..	" "	3,311	4,217	4,471	5,536	5,984
Rice clean .. ..	'000 cwt.	245	343	335	298	279
(paddy), seed requirements .. ..	" "	"	"	9	12	13
Wheat .. ..	'000 bush.	31,903	34,258	39,767	37,222	39,061
seed requirements .. ..	" "	10,387	11,752	16,158	14,210	14,179
<b>Root Crops—</b>						
Onions .. ..	Ton	32,058	30,928	42,067	38,729	39,733
Potatoes .. ..	"	283,644	311,866	314,236	292,129	328,125
seed requirements .. ..	"	45,936	48,645	49,451	48,153	39,898
<b>Other Crops—</b>						
Dried grapes .. ..	"	"	"	"	"	"
Raisins .. ..	"	7,039	9,282	11,363	12,307	17,687
Currants .. ..	"	4,096	4,195	4,308	4,137	5,159
Sugar, raw .. ..	"	266,242	303,010	345,942	338,471	384,161
refined .. ..	"	254,261	289,375	330,375	323,240	366,874
<b>Dairy Produce—</b>						
Butter .. ..	'000 lb.	126,484	161,750	187,372	203,188	225,386
Cheese .. ..	"	17,855	21,320	25,192	25,375	28,552
Milk .. ..	'000 gal.	100,162	128,754	140,645	150,212	164,771
<b>Meats—</b>						
Beef .. ..	'000 lb.	558,487	769,638	742,577	746,162	949,201
Mutton .. ..	"	"	"	389,989	443,342	423,032
Lamb .. ..	"	353,727	359,198	68,202	92,940	92,577
Pork .. ..	"	20,911	30,006	41,247	54,574	51,548
Bacon and ham .. ..	"	52,483	64,652	75,449	69,885	73,369
<b>Total Meats</b> .. ..	"	985,608	1,223,494	1,317,464	1,406,903	1,589,727
<b>Drink and Tobacco—</b>						
Beer .. ..	'000 gal.	63,196	64,823	66,358	54,646	84,003
Spirits (potable) .. ..	"	2,752	2,361	2,168	1,275	1,562
Tobacco .. ..	'000 lb.	14,957	18,699	20,230	18,933	25,627
<b>Other Foodstuffs—</b>						
Biscuits .. ..	"	87,311	76,291	69,951	53,882	71,923
Coffee .. ..	"	2,671	3,197	3,301	3,834	5,533
Fish, fresh .. ..	"	(a)	51,104	65,790	67,545	72,965
preserved in tins .. ..	"	15,695	22,588	23,557	20,176	25,023
Flour, wheaten .. ..	Ton	559,442	604,239	641,968	673,800	646,180
Fruit, Canned .. ..	"	(a)	(a)	(a)	(a)	77,807
Jam .. ..	'000 lb.	71,451	61,264	76,687	76,405	84,012
Margarine .. ..	"	(a)	(a)	24,255	22,209	35,608
Milk, Condensed .. ..	"	"	"	"	"	"
concentrated .. ..	'000 lb.	(a)	26,274	24,763	23,627	25,247
Powdered .. ..	"	(a)	8,656	9,913	10,376	20,190
Oatmeal .. ..	'000 cwt.	(a)	(b)	296	301	270
Sago and tapioca .. ..	'000 lb.	9,047	9,961	8,070	8,347	8,869
Tea .. ..	"	40,323	44,608	47,593	45,427	48,050
<b>Other Commodities—</b>						
Soap .. ..	'000 cwt.	689	781	915	868	954
Kerosene .. ..	'000 gal.	20,489	25,873	50,525	41,361	53,758
Motor spirit .. ..	"	20,929	75,357	206,196	225,688	341,708
Cement—portland .. ..	Ton	(a)	(b) 520,622	651,618	437,309	836,755

(a) Not available.

(b) Average for four years ended 1925-26.

CONSUMPTION OF COMMODITIES: ESTIMATE OF ANNUAL REQUIREMENTS  
PER HEAD OF POPULATION, AUSTRALIA.

Commodity.	Seven years ended 1920-21.	Five Years ended—			
		1925-26.	1930-31.	1935-36.	1940-41.
	lb.	lb.	lb.	lb.	lb.
Barley .. ..	30.76	29.25	34.28	32.50	45.84
„ seed requirements	3.29	3.56	3.94	5.00	7.89
Maize .. ..	91.55	94.84	76.43	58.80	58.55
„ seed requirements..	0.98	0.88	0.79	0.56	0.81
Oats .. ..	72.83	74.92	60.16	65.60	58.92
„ seed requirements ..	20.01	29.33	28.23	33.20	34.62
Rice (clean) .. ..	5.44	6.68	5.93	5.02	4.52
„ (paddy), seed require- ments .. ..	..	..	0.17	0.21	0.22
Wheat .. ..	375.93	357.00	376.80	335.40	338.40
„ seed requirements	122.39	122.40	153.00	128.40	123.00
Onions .. ..	14.13	12.04	14.88	13.04	12.86
Potatoes .. ..	124.78	121.46	111.13	98.35	106.22
„ seed requirements	20.25	18.95	17.49	16.21	12.92
Dried grapes—Raisins ..	3.09	3.61	4.02	4.14	5.72
„ Currants .. ..	1.80	1.64	1.52	1.39	1.67
Sugar, raw .. ..	117.13	118.01	122.34	113.96	124.35
„ refined .. ..	111.86	112.70	116.84	108.83	118.76
Butter .. ..	24.84	28.12	29.58	30.54	32.57
Cheese .. ..	3.51	3.71	3.98	3.81	4.13
Beef .. ..	109.08	133.81	117.24	112.15	137.17
Mutton .. ..	} 69.47	62.45	61.57	66.64	61.13
Lamb .. ..			10.77	13.97	13.78
Pork .. ..	4.11	5.22	6.50	8.20	7.45
Bacon and ham .. ..	10.31	11.24	11.91	10.50	10.60
<i>Total Meats</i> .. ..	<i>193.57</i>	<i>212.72</i>	<i>207.99</i>	<i>211.46</i>	<i>230.13</i>
Tobacco .. ..	2.94	3.25	3.19	2.84	3.70
Biscuits .. ..	17.15	13.26	11.04	8.10	10.39
Coffee .. ..	0.52	0.56	0.52	0.58	0.80
Fish, fresh .. ..	(a)	8.88	10.39	10.15	10.54
„ preserved in tins ..	3.08	3.93	3.78	3.03	3.62
Flour, wheaten .. ..	219.74	210.11	202.70	202.55	186.76
Fruit, Canned .. ..	(a)	(a)	(a)	(a)	11.24
Jam .. ..	14.03	10.66	12.11	11.48	12.14
Margarine .. ..	(a)	(a)	3.83	3.34	5.15
Milk, Condensed and Con- centrated .. ..	(a)	4.57	3.91	3.55	3.65
„ Powdered .. ..	(a)	1.50	1.59	1.56	1.92
Oatmeal .. ..	(a)	(b) 4.49	5.32	4.55	4.58
Sago and Tapioca .. ..	1.78	1.73	1.27	1.25	1.28
Tea .. ..	7.92	7.76	7.51	6.83	6.94
Soap .. ..	15.16	15.20	16.18	14.62	15.44
Cement—portland .. ..	(a)	(b) 196.61	230.44	147.23	270.86
	gal.	gal.	gal.	gal.	gal.
Milk (fluid) .. ..	19.67	22.39	22.20	22.58	23.81
Beer .. ..	12.41	11.27	10.48	8.23	12.14
Spirits (potable) .. ..	0.54	0.41	0.34	0.19	0.23
Kerosene .. ..	4.02	4.50	7.98	6.22	7.77
Motor Spirit .. ..	4.11	13.10	32.55	33.92	49.38

(a) Not available.

(b) Average for four years ended 1925-26.

2. *International Comparison.*—The difficulties associated with the compilation of statistics of consumption in Australia have already been mentioned, and the absence of corresponding figures for other countries suggests a similar experience abroad. Some details are published in other countries, but these are restricted to a few commodities, and an extensive comparison on an international basis is not possible.



In the absence of complete details of the methods used in their computation, it is not possible to say whether the figures given are comparable in all respects with those shown for Australia. It is known that in some instances the figures relate to a single year, while those for Australia refer to the average over five years. In the following table the figures for Australia are below the normal; as the period taken included some years of the economic depression.

The details given in the following table have been taken from official or other authoritative sources and are the best available. They do not afford a comparison of the standards of living in the various countries, but are intended to present a comparison of more than usual interest.

### CONSUMPTION PER HEAD OF POPULATION IN VARIOUS COUNTRIES.

Commodity.	Unit of Quantity.	Average annual consumption per head of population.				
		Australia.	New Zealand.	Canada.	United Kingdom.	U.S.A.
Wheat (excluding seed) ..	Bus.	5.6	5.7	5.5	5.8	4.7
Flour, wheaten ..	lb.	203	180	166	200	160
Sugar, refined ..	"	109	115	96	102	105
Milk, whole ..	Gal.	22.5	22.5	37.0	21.0	(a)
Butter ..	lb.	30.5	40.0	31.8	24.8	16.7
Cheese ..	"	3.8	8.0	3.6	8.6	5.4
Eggs ..	Doz.	(a)	20.0	20.8	13.0	(a)
Beef ..	lb.	112	140	62	69	63
Mutton and lamb ..	"	81	88	6	30	7
Pig Meat ..	"	19	21	57	42	55
<i>Total Meats</i> ..	"	212	249	125	141	125
Wine ..	Gal.	0.3	0.2	0.3	0.3	0.4
Beer ..	"	8.2	8.6	6.0	33.1	13.0
Spirits (potable) ..	"	0.2	0.3	0.3	0.2	0.9
Tobacco ..	lb.	2.8	3.5	3.9	3.9	6.6
Tea ..	"	6.8	6.7	3.6	9.2	0.7
Coffee ..	"	0.6	(a)	3.2	0.7	13.3
Raisins and currants ..	"	5.5	8.4	3.8	5.7	2.2
Rice ..	"	5.0	5.3	7.3	5.2	(a)
Onions ..	"	13	12	(a)	(a)	(a)
Potatoes ..	"	98	108	(a)	241	(a)

(a) Not available.

## § 12. Film Censorship.

1. **Legislation.**—The censorship of imported films derives its authority from Section 52 (g) of the Customs Act, which gives power to prohibit the importation of goods. Under this section regulations have been issued prohibiting the importation of films except under certain conditions and with the consent of the Minister. The regulations provide, *inter alia*, that no film shall be registered which in the opinion of the Censor is (a) blasphemous, indecent or obscene; (b) likely to be injurious to morality, or to encourage or incite to crime; (c) likely to be offensive to the people of any friendly nation; (d) likely to be offensive to the people of the British Empire; or (e) depicts any matter the exhibition of which is undesirable in the public interest.

The regulations governing the exportation of Australian-made films are similar, with the addition that no film may be exported which in the opinion of the Censorship is likely to prove detrimental or prejudicial to the Commonwealth of Australia.

The Censorship consists of a Censorship Board of three persons and an Appeal Censor, the head-quarters being in Sydney. There is also a right of appeal to the Minister.

In addition to the censorship of moving pictures, the Censorship may refuse to admit into Australia any advertising matter proposed to be used in connexion with the exhibition of any film. Such control does not, however, extend to locally-produced publicity.

2. **Imports of Films.**—Imported films dealt with by the Censorship for the year 1943 were as follows:—1,620 films of 3,938,176 feet passed without eliminations, 43 films of 266,062 feet passed after eliminations, and 2 films of 13,420 feet rejected in first instance, making a total of 1,665 films of 4,217,658 feet (one copy). The countries of origin were as follows:—United States of America, 915 films of 2,977,555 feet; United Kingdom, 524 films of 920,264 feet; and 226 films of 319,839 feet from other countries.

The foregoing figures relate to standard size films (35 millimetres). There were also imported during 1943, 629 miniature films (16, 9.5 and 8 millimetres) of 259,421 feet.

3. **Exports of Films.**—The number of films exported for the year 1943 was 644 of 641,581 feet, of which 465 films of 511,512 feet were sent to places in the British Empire including Mandated Territories.

### § 13. Marketing of Australian Commodities.

1. **Introduction.**—Particulars in respect of the various Commonwealth Acts and Regulations together with the operations of the Boards or Councils appointed to assist or control the marketing of Australian commodities are set out below. It should be noted that the particulars refer to the marketing of Australian commodities in the normal times of peace, and that no reference has been made to changes induced since the outbreak of War. A brief summary of the war-time arrangements for the marketing and sale of Australian commodities is included in § 14.

2. **Dairy Produce.**—(i) *The Dairy Produce Export Control Act 1924-1938.* Introduced at the request of the dairying industry this Act was passed by the Commonwealth Parliament with the object of organizing the overseas marketing of Australian dairy produce. A Dairy Produce Control Board was appointed and was in existence from 1924 to 1935. It dealt with matters relating to the organization and supervision of overseas marketing of dairy produce. In the course of its functions the Board regulated shipments to ensure regularity of supply in the London market, controlled forward selling, obtained reductions in overseas freights and insurance rates, and participated in an advertising campaign in the United Kingdom.

Prior to the appointment of the Dairy Produce Control Board a voluntary body—the Australian Dairy Council—was established to advise and make recommendations to the Governments on problems connected with the production, manufacture and quality of dairy produce, pasture improvement and diseases of dairy cattle.

Following a recommendation by the Australian Agricultural Council the functions of these bodies were combined by an amending Act of 1935 under the Australian Dairy Produce Board and provision was made for the allocation of money from the Board's funds for research and investigation into pastures, diseases of dairy cattle and the quality of butter.

(ii) *The Dairy Produce Export Charges Act 1924-1937.* This Act provides for the imposition of a levy on all butter and cheese exported from Australia to cover the administrative expenses of the Board and for advertising and other purposes. The rate of the levy is fixed by regulation.

(iii) *The Dairy Produce Act 1933-1935.* In § 1 par. 3 of Chapter XXIII. "Farmyard, Dairy and Bee Products" reference is made to the voluntary and compulsory plans introduced for the purpose of stabilizing the prices of dairy produce in Australia. Under State legislation regulating authorities fixed the proportion of the States' output to be sold within the respective States, and the Dairy Produce Act was passed by the

Commonwealth Parliament to protect these "quotas" from the effects of interstate competition. A decision of the Privy Council in 1936, however, held that the Commonwealth had no power under its Constitution to control interstate trade and the Commonwealth legislation is therefore inoperative. The industry is now carrying on its stabilization plan on a purely voluntary basis.

3. *Dried Fruits.*—(i) *The Dried Fruits Export Control Act 1924-1938.* This Act was passed by the Commonwealth Parliament at the request of the dried fruits industry to organize the oversea marketing of Australian dried vine fruits. The Dried Fruits Control Board, consisting of eight members—including five growers' representatives, two members with commercial experience and one Government nominee—was appointed to control the export, and the sale and distribution after export, of Australian sultanas, currants and lexias. In conjunction with its London agency, the Board has improved the marketing of Australian dried fruits overseas, and has increased the demand for the product. Its system of appraisement has resulted in more satisfactory realizations. Its methods of ensuring continuity of supply and regulating shipments and its participation in the advertising campaign of the Australian Overseas Trade Publicity Committee have benefited the industry considerably. No dried fruits may be exported except by means of a licence, which is issued subject to conditions recommended by the Board.

(ii) *Dried Fruits Export Charges Act 1924-1929.* This Act provides for the imposition of a levy on all sultanas, currants and lexias exported from Australia for the purpose of defraying the administrative expenses of the Board and the cost of advertising, etc. The rate of the levy is fixed by regulation. Under an amendment made in 1927 provision was made for the exemption of sultanas, currants and lexias from the levy upon recommendation by the Board.

(iii) *The Dried Fruits Act 1928-1935.* In previous issues of the Official Year Book reference has been made to the Dried Fruits Act and its provisions outlined (see p. 894 of Official Year Book, No. 28). This legislation is in a similar position to that for dairy produce referred to in par. 2 (iii) above.

4. *Canned Fruits.*—(i) *The Canned Fruits Export Control Act 1926-1938.* This legislation was introduced at the request of canners and representative organizations of fruit-growers with the object of organizing the oversea marketing of canned fruit. The original Act referred to canned apricots, peaches and pears only, but canned pineapples and canned fruit salads consisting of not less than 75 per cent. of specified fruits were subsequently brought within the scope of the Board's operations. The personnel of the Australian Canned Fruits Board consists of one representative each from proprietary and privately owned canneries, co-operative canneries, State-controlled canneries, pineapple interests and the Commonwealth Government. No canned fruits to which the Act applies are permitted to be exported except under a licence issued in accordance with conditions recommended by the Board. The system of marketing adopted by the Board, including the fixation of minimum selling prices overseas, the appointment of a London agency and the engaging in oversea trade publicity, has resulted in the satisfactory disposal of the annual exportable surplus of canned fruits. The distribution of canned fruits has been widened and the exporting side of the industry placed on a sounder basis through the Board's operations.

(ii) *The Canned Fruits Export Charges Act 1926-1938.* This Act provides for the imposition of a levy on the export of canned fruits to meet the administrative and other commitments of the Board. The rate of the levy is fixed by regulation from time to time. An amendment in 1929 provided for certain exemptions from payment of the levy when recommended accordingly by the Board.

5. *Wine.*—(i) *The Wine Overseas Marketing Act 1929-1936.* This Act was introduced at the request of the viticultural interests in Australia with the object of placing the overseas marketing of Australia's surplus wine on an orderly basis. The Wine Overseas Marketing Board was appointed to supervise the exports, and the sale and distribution after export of Australian wine.



The name of the Board was changed to the Australian Wine Board in 1936. No wine may be exported except by means of a licence, which is issued under conditions recommended to the Minister by the Board; these include the withholding of shipments as directed by the Board. The Board has a London agency which advises on marketing conditions. The methods of marketing adopted by the Board have resulted in the widening of the distribution of Australian wines overseas.

(ii) *The Wine Grapes Charges Act 1929-1937*. This Act provides for the imposition of a levy on all grapes used in Australia for the manufacture of wines or spirit used for fortifying wine. The proceeds of the levy are used to defray the administrative and other expenses of the Board, and provision is made for such exemptions from the levy as the Board may recommend.

6. *Meat*.—(i) *The Meat Export Control Act 1935-1938*. This Act was introduced following a decision of a conference of Commonwealth and State Ministers with members of the Commonwealth Meat Advisory Committee, held in October, 1935, to set up a Meat Board with defined statutory powers. The Australian Meat Board, which was appointed under the Act in January, 1936, consists of eighteen members, representative of producers, processors, exporters and the Commonwealth Government. Provision is made for the appointment from within the Board of an Executive Committee and a Beef Committee. Export of meat is controlled by licence. The Board has power to regulate shipments of meat and to arrange contracts in respect of freights and insurances; to promote overseas sales by advertising and to foster research into meat problems; and to supervise the issue of export licences. The Board also has power to appoint a London representative.

(ii) *The Meat Export Charges Act 1935*. By means of a levy collected on all meats exported from Australia, funds are provided for the purpose of defraying the expenses and charges incurred by the Australian Meat Board in the course of its business. The customary provision is made for exemption from the levy when recommended by the Board.

7. *Apples and Pears*.—(i) *The Apple and Pear Organization Act 1938*. This Act which was passed by the Commonwealth Parliament at the request of the Apple and Pear industry, provides for the establishment of an Australian Apple and Pear Board for the purpose of organizing and controlling the export trade in fresh apples and pears.

The Board consists of one member to represent the Commonwealth Government; eleven members to represent the growers of apples and pears on the basis of four from Tasmania, two each from Victoria and Western Australia, and one each from New South Wales, Queensland and South Australia; and four members to represent exporters of apples and pears on the basis of one from each of the States of Victoria, South Australia, Western Australia and Tasmania.

The Board has power to regulate the shipment of apples and pears from Australia by licensing exporters and issuing permits to export. Power is also given to determine export quotas, and to allocate the consignments from each State. The Board may appoint persons to represent it overseas.

(ii) *The Apple and Pear Export Charges Act 1938*. This Act provides for the imposition of a levy on all apples and pears exported from Australia for the purpose of providing the funds necessary to meet the administrative and other expenses of the Board.

(iii) *The Apple and Pear Publicity and Research Act 1938*. Under this Act, the Australian Apple and Pear Board is empowered to expend moneys, specifically collected and appropriated, for the purpose of increasing and extending the consumption of apples and pears throughout Australia by publicity, research or any other means.

The fund for this purpose is to be created from the proceeds of a tax levied on all apples and pears sold for consumption in Australia as fresh fruit. Apples and pears exported or to be exported, or processed or to be processed, are exempt from the tax.

The related taxing measures are:—The Apple and Pear Tax Act 1938 and the Apple and Pear Tax Assessment Act 1938.

8. **Wheat Industry Assistance Act 1938.**—This legislation, which came into operation in December, 1938, supplements legislation of a uniform type passed by all the State Parliaments, and is designed to enable the operation of a home consumption price scheme for the wheat industry on an Australian basis.

The legislation is based on a home consumption price of 5s. 2d. a bushel, free on rail, Williamstown, equivalent to 4s. 8d. at country sidings. When the price of wheat falls below that level the returns of growers will be supplemented by payments from a fund established from the proceeds of a flour tax which varies inversely with the price of wheat. When the export price rises above that level provision is made for a tax on wheat sold, the proceeds of which are to be applied to ensure that the cost of wheat gristed for home consumption shall not exceed 5s. 2d. per bushel.

Out of the general fund a sum not exceeding £500,000 per year will be reserved during the first five years for special purposes including the transfer of producers growing wheat on marginal lands to other areas where they will be able to engage in mixed farming or to enable them to increase the size of their holdings to make wheat-growing worth while.

A Wheat Stabilization Advisory Committee has been established to determine the appropriate times for a variation in the rate of tax which will be fixed on the basis of a rigid formula.

The State legislation undertakes to ensure that prices charged to consumers are reasonable and the Commonwealth legislation contains provision that no State shall be entitled to receive payments where that undertaking is not carried out.

With the acquisition of wheat by the Commonwealth Government after the outbreak of War and the payment direct to them by the Wheat Board, the provision for payment of flour tax to growers was varied by the Wheat Industry (War-time Control) Act, 1939. Flour tax proceeds under this Act are paid into the Commonwealth Bank for repayment of advances made and in this way are incorporated with the receipts of the wheat pools.

9. **Export Guarantee Act.**—For a considerable time this Act has not been invoked directly to provide for assistance in the marketing of primary products. The Dried Fruits Advances Act, disbursements under which were made for the appropriation pursuant to the Export Guarantee Act, has ceased to operate. The Board of Trade, which was formed to advise and recommend on expenditure proposed under the Act, has not functioned for some years. The only recent expenditure under the Act has been in respect of special oversea trade publicity, but since 1st July, 1934, expenditure under that heading has been made the subject of a separate appropriation. The total assistance granted under the Act during its period of operation amounted to £670,574 which included substantial payments on account of both the Dried Fruits Advances Act and oversea trade publicity. Although the Export Guarantee Act has not been repealed, it is not proposed that any further payments shall be made under it.

## § 14. War-time Marketing of Primary Products.

1. **General.**—Prior to the outbreak of the present War an understanding had been reached by the Governments of the United Kingdom and the Commonwealth which enabled exports from Australia to proceed normally even before any contracts for the sale of commodities had been concluded.

On the outbreak of hostilities, the existence of Statutory Boards for the meat, dairy produce and fruit industries facilitated war-time organization. The experience already gained in marketing control enabled the Commonwealth Government to proceed quickly with the formation of committees and/or boards in those industries where Statutory Boards or organizations had not been established previously, namely, the Central Wool Committee, the Australian Wheat Board, the Australian Barley Board, the Apple and Pear Marketing Committee, the Australian Hide and Leather Industries Board, the Shipping Control Board, and a Committee to supervise the export of eggs.

In addition to the organizations established in respect of these commodities, a Shipping Control Board was set up to control coastal shipping should the need arise for close supervision and control of cargo movements in interstate trade. At a later stage, a Shipping Committee was established to control and supervise oversea shipping to and from Australia in conjunction with the Ministry of Shipping in the United Kingdom.

Prior to the outbreak of War, a survey was made of refrigerated and cold storage space in Australia. Thus the handling of refrigerated produce up to the time of shipment was not only facilitated, but the survey was also of material assistance in connexion with the arrangements made subsequently for the transport of commodities to the United Kingdom.

2. Wool.—The Government of the United Kingdom has arranged with the Commonwealth Government to acquire the Australian wool clip for the duration of the War and one full wool season after the cessation of hostilities.

The arrangement embraces all wool, wool tops, noils and waste, not required for use by Australian manufacturers.

The principal conditions of the arrangement are :—

- (i) The United Kingdom Government will pay 10½d. (Stg.) equivalent to 13.4375d. (Aust.) per lb. flat rate price for the wool in store at the oversea port of shipment.
- (ii) The United Kingdom Government will pay up to ¾d. (Stg.) equivalent to ¾d. (Aust.) per lb. to cover all costs from store at port of oversea shipment, to ship.
- (iii) The United Kingdom Government will pay to the Commonwealth Government 50 per cent. of the profits derived from wool sold for use outside the United Kingdom, which sales shall be at the order and disposition of the United Kingdom Government.
- (iv) In May of each year the arrangement shall be subject to review at the instance of either Government.

In May, 1942, the flat rate price payable by the United Kingdom Government was reviewed at the instance of the Commonwealth Government. The United Kingdom Government agreed to an increase of 15 per cent. in the flat rate price, thus bringing such price to 15.453125d. (Aust.) per lb.

In Australia the scheme is administered by the Central Wool Committee (with subordinate State Committees) which controls the receipt of the wool into store, its appraisalment and shipment overseas. The Central Wool Committee cables to the United Kingdom Government the appraised value of the wool comprised in each round of appraisements and the United Kingdom Government makes the necessary funds available to the Committee. These are paid to the respective growers within fourteen days of appraisalment, less a percentage retained by the Central Wool Committee to enable each grower's return to be adjusted in conformity with the flat rate price paid by the United Kingdom Government. During the first season (1939-40) of operation of the scheme the amount so retained was 10 per cent. but for the 1940-41 and subsequent clips up to and including the 1943-44 clip only 5 per cent. was retained.

During the 1939-40 season the issue price of wool for Australian manufacturers was the "appraised price". From 1st July, 1940 (1940-41 season) the issue price was fixed by the Central Wool Committee at the "appraised price", plus cost of delivery plus 7½ per cent., and for the 1941-42 season the surcharge of 7½ per cent. was increased to 15 per cent.

From 1st July, 1942, the price to manufacturers was fixed by the Central Wool Committee according to a determination notified to it by the Commonwealth Prices Commissioner, who determined that the surcharge shall be 10 per cent.

3. Meat.—From 1st October, 1939, to 30th September, 1940, the United Kingdom Government agreed to purchase f.o.b. 240,000 tons of beef, mutton, lamb, veal and pork, and to use its best endeavours to lift any additional quantities available for export. The contract embodies a long range of prices for various cuts, pieces and offals. The returns



to Australian producers were satisfactory and were higher than those received during the previous season. Under the contract 90 per cent. is paid on shipment and 10 per cent. within 28 days of arrival, or in the case of a steamer being lost, the estimated due date of arrival.

The contract was renewed for the year 1st October, 1940, to 30th September, 1941, and covered beef, veal, mutton, lamb, porker pork and offals and baconer pork. Under this contract certain classes of meat were not accepted and there were slight variations in some prices.

Arrangements have been made with the United Kingdom Government for the disposal of a larger proportion of Australia's meat surplus in the form of canned meats. Although this means that producers received lower prices for their total marketed product, the scheme has made it possible for the stability of the industry to be maintained in the face of a drastic reduction in the amount of refrigerated shipping space available.

During 1942, mainly owing to shipping difficulties, there was considerable doubt whether the United Kingdom could lift all meat available, but early in 1943 the shipping position became easier, and the United Kingdom asked for as much meat as Australia could supply.

However, owing to the greatly increased demands for meat for the Australian and Allied Services, which became apparent early in 1943, the "surplus" available for export was less than during pre-war years despite efforts to increase production and the increased production which resulted.

During the later months of 1943, the Commonwealth Government took steps to restrict the quantity of meat available to civilians in an endeavour to increase the quantity of meat available for export. When this action was taken, it became necessary for the Commonwealth Government to purchase mutton for export at prices more closely related to local prices.

In January, 1944, in order to ensure an equitable distribution of available supplies to civilians, coupon rationing of meat was introduced.

The United Kingdom Government is prepared to take all suitable meat which can be shipped during 1944. Owing to the heavy demands for meat for the defence forces based in Australia, the export programme for 1944, despite a high level of production and civilian meat rationing is, however, still lower than during the immediate pre-war years.

As in 1943, the programme for export to the United Kingdom covers frozen and canned meats, dehydrated mutton and offals, the greatest demand being for frozen meat.

4. **Butter.**—The following table indicates the periods covered, target figures, actual exports, and prices per cwt. f.o.b. Australian currency for the various grades, including whey butter.

The conditions of sale provided for payment of 90 per cent. on shipment, and the balance 28 days after arrival or due date of arrival.

For the year 1941-42, second, pastry and all whey butters were excluded; moreover the butter target was reduced to 57,000 tons to permit of diversion to cheese production at the request of the United Kingdom Government.

Prices were increased as from 1st July, 1942, by amounts shown in the table. Also second grade butter was re-included, and the Ministry sought 10,000 tons of dry butterfat at the following prices per cwt. f.o.b. Australian currency:—Grade 1, 195s. 7½d.; Grade 2, 181s. 3d. Actually 2,203 tons of dry butterfat were exported during that period.

Pastry and whey butters were re-included as from 1st July, 1943.

While the 1943-44 prices were the same as those applying for 1942-43, the United Kingdom Government agreed additionally to reimburse the Commonwealth Government to the extent of subsidy paid on butter and cheese exported on Ministry account during the year ended 31st March, 1944.

Negotiations are proceeding between the United Kingdom, New Zealand and the Commonwealth Governments with a view to the United Kingdom contracting to purchase the butter and cheese export surpluses of Australia and New Zealand at firm prices up to the year ending 30th June, 1948.

## BUTTER.

Period.	Target.	Actual.	Prices per Cwt.			F.o.b. Australian Currency.			
			Choice.	1st.	2nd.	Pastry.	Whey, 1st.	Whey, 2nd.	Whey Pastry.
			s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
20th November, 1939 to 30th June, 1940	75,000	66,882	137 2½	135 7½	131 1½	127 6	127 6	122 6	117 6
1940-41 ..	100,000	77,843							
1941-42 ..	57,000	46,847	142 9½	141 3	136 9½	127 6	127 6	122 6	117 6
1942-43 ..	70,000	48,911							
1943-44 ..	55,000	..	142 9½	141 3	136 9½	133 1½	133 1½	128 1½	123 1½

(a) The United Kingdom Government asked for minimum of 55,000 tons. Australia indicated that it could supply maximum of 45,000 tons only.

The Dairy Produce Control Committee was appointed to manage the contracts for butter and cheese. The Committee works in close collaboration with the Australian Dairy Produce Board and the Commonwealth Dairy Produce Equalization Committee, Ltd., and has associated with it the State Advisory Committees.

Arrangements were made by the Committee for advances to be made in respect of butter and cheese held for shipment against the contracts and also for the insurance against war risk during such storage.

Early in 1941 the question of the adequacy of cold storage accommodation arose, and the Committee arranged for the provision of emergency cold stores at selected points, the cost being borne by the Government and the industry in equal shares.

5. **Cheese.**—The following table indicates the periods covered, target figures, actual exports and prices per cwt. f.o.b. Australian currency for the various grades.

Conditions for payment were on the same terms as for butter.

For the year 1941-42, the United Kingdom sought diversion from butter to cheese production, and undertook to purchase maximum quantities, with a minimum of 40,000 tons, at increased prices, as shown in the table.

Prices were increased further for the year 1942-43 as shown.

As in the case of butter the United Kingdom Government has agreed to reimburse the Commonwealth Government for subsidy paid on cheese exports since 1st April, 1943.

Moreover, cheese is included in the proposed Long-term Contract extending up to 30th June, 1948.

## CHEESE.

Period.	Target.	Actual.	Prices per Cwt. f.o.b. Australian Currency.		
			Choicest, First.	Second.	Third.
			s. d.	s. d.	s. d.
20th November, 1939, to 30th June, 1940	13,000	11,063	76 6½	74 0½	71 6½
1940-41 ..	20,000	10,118			
1941-42 ..	40,000	6,569	87 6	85 0	82 6
1942-43 ..	10,000	6,067			
1943-44 ..	10,000	..			

The arrangements in relation to cheese were controlled by the Dairy Produce Control Committee (see par. 4 above).

When the United Kingdom authorities in 1941 desired greatly increased supplies of cheese, the Committee took action to convert butter-making establishments to cheese-making, the financial burden being thus distributed over the industry.

6. Eggs.—The United Kingdom Government contracted to purchase eggs packed for export up to 31st December, 1939. The quantity mentioned in the agreement was 900,000 long hundreds, but subject to freight being available, the United Kingdom Government agreed to accept any additional quantity available for export on the same terms as those specified in the agreement. The prices in Australian currency f.o.b. Australian port, were: 13½-lb. packs 9s. 10.83d.; 15-lb. and 16-lb. packs 12s. 2.87d.; and 17-lb. and 18-lb. packs 12s. 4.25d. On shipment, 85 per cent. was paid, and 15 per cent. within 28 days after arrival.

A further contract covering eggs shipped between 1st July, 1940, and 31st December, 1940, was made at prices which represented an increase of 1s. 3d. (Aust.) per long hundred for each pack over prices in the previous contract. In addition, the terms of payment were improved to 90 per cent. on shipment instead of the previous 85 per cent.

Negotiations for the extension of the contract to cover eggs available for shipment during the months of January and February, 1941, were successfully concluded.

Early in 1941, however, the United Kingdom Government advised that refrigerated shipping space would not be available for the export of eggs in shell, and the Commonwealth Government was asked that all surplus eggs over and above Australian requirements should be processed into dried egg powder. This process had not previously been carried out in Australia, and a number of egg drying plants were obtained from abroad and installed in New South Wales and Victoria in time for operation during the 1941-42 season. Subsequently an additional plant was obtained from abroad and installed in Western Australia early in the 1942-43 season. At the same time a modern egg drying plant was wholly manufactured in Australia, and is now operating satisfactorily in South Australia. Consignments of egg powder were shipped from Australia to the United Kingdom during the 1941-42 and 1942-43 seasons, and were very favourably commented upon. Since then, however, it has not been possible to ship egg powder from Australia to the United Kingdom owing to the heavy demand for this commodity by the Allied Fighting Services located in the Pacific area.

7. Sugar.—Arrangements were concluded by the Queensland Government for the sale to the British Ministry of Food of the surplus production of raw sugar *ex* the 1942 crop at £13 15s., sterling per ton c.i.f. United Kingdom ports, basis 96 degrees polarization, which price includes the existing British tariff preference of £3 15s. on Dominion sugar. It was arranged that shipments of sugar would be made to Empire and Allied consuming countries (including New Zealand and Canada) in accordance with the requirements of the Ministry of Food, as and when sugar and suitable freight were available.

8. Canned Fruits.—The United Kingdom Government agreed to take a quantity of canned apricots, peaches and pears from the 1940 season's pack. The prices payable under the purchase were fixed on f.o.b. basis Australian ports.

The terms of the contract provided that, in respect of quantities shipped prior to the conclusion of the negotiations, 90 per cent. of the value of the fruit, together with freight and other charges paid in Australia, became payable upon arrival in the United Kingdom and the balance of 10 per cent. within 28 days. For subsequent shipments, 90 per cent. of the purchase value was payable at the time of export and the remainder within 28 days after arrival at the port of destination.

A further arrangement was concluded with the United Kingdom Government under which the British Ministry of Food agreed to take over the exportable surplus of the 1941 season's pack. Under the contract for 1941, canners received payment of 100 per cent. of the agreed prices on shipment of the fruit from Australia.



Service demands took most of the 1942 and 1943 seasons' packs, leaving only limited quantity for the civilian consumption.

Australian and Allied (S.W.P.A.) Service and ancillary Service demands on the 1944 season's pack were such that supplies could not be made available for general commercial export.

Some quantities were provided for New Zealand's Service and Civilian requirements, and for War Office demands in India and the Middle East.

Supplies were allocated for the Australian domestic market on quota basis, but although stocks made available were below normal market requirements, they were reasonable having regard to all other demands made against production.

**9. Apples and Pears.**—To meet the emergency conditions which confronted the apple and pear industry following the outbreak of War, the Commonwealth Government promulgated the National Security (Apple and Pear Acquisition) Regulations on 14th November, 1939, to provide for the acquisition and orderly marketing of the 1940 crop. A Marketing Committee of the Australian Apple and Pear Board was appointed to supervise the whole of the marketing arrangements and State Committees were set up to assist in the administration of the Scheme.

All growers occupying orchards of which not less than one acre was wholly or principally used for the growing of apples and/or pears were required to register under the regulations and to furnish particulars of their plantings and production. The registration of other persons growing apples or pears was not compulsory.

Until 1st March, 1940, the marketing of the crop proceeded in the usual manner but from that date the Commonwealth acquired all apples and pears in Australia, subject to minor exemptions, and the sale of any apples or pears not grown by a registered grower was prohibited.

Advances were made to the growers in respect of compensation payments at the rates of 2s. a bushel on apples and 3s. a bushel on pears on the basis of 75 per cent. of their estimated production which was determined by an official assessment of the individual crops. In addition growers received a further advance of 1s. a bushel on apples and pears of prescribed quality delivered to places or to agents of the Board. All advances in respect of compensation were on the basis of bare fruit, the costs of cases and packing, freight, storage and all marketing expenses being met by the marketing authority.

Agents have been appointed throughout Australia to receive and deal with apples and pears as directed, and a system of distribution devised to meet the particular needs of the domestic market in each State. Insofar as freight has been available, overseas shipments have been directed from those States having the largest quantities available for export.

The Acquisition Scheme was continued for the 1941 season, but an Australian Apple and Pear Marketing Board was constituted under the Regulations to administer the Scheme. The Board consisted of a Chairman, a Deputy Chairman, and six other members respectively representing each of the six States. The Chairman and Deputy Chairman constituted a full time Executive of the Board. State Committees, on lines similar to those of the previous year, were also set up to assist in the administration of the Scheme.

The acquisition arrangements for 1941 differed in several important respects from those of 1940 :—(i) Acquisition was effected on 1st January, instead of 1st March ; (ii) Instead of making advances to growers at flat rates, a unit system was adopted which provided for differential rates as between States, and as between varieties of apples and pears produced in each State ; and (iii) Fruit had to be actually delivered to the Board before qualifying for advances, except where delivery was not required for marketing. In these cases qualifications for advances were established on the basis of an official tree measurement at the time of maturity.

The administration and marketing arrangements were, in general, along lines similar to those of 1940.

The Australian apple and pear crop was again acquired by the Commonwealth for the 1942 season, but certain administrative changes were made and the Australian Apple and Pear Marketing Board was reconstituted to comprise four members—A Chairman,

a Deputy Chairman, an Executive Member and a Government Finance Member. State Committees continued to function, but the Executive Committee of the Board was discontinued.

In 1943 the Government took action to acquire the apple and pear crops in Western Australia and Tasmania, only, and the operations of the Board were concerned with the marketing of the fruit from those States only. In all the other States the growers were not subject to any control by the Board, and were free to dispose of their fruit through the normal channels of distribution.

**10. Wheat and Flour.**—The Australian Wheat Board was established at the outbreak of war to control the handling and marketing of wheat. The price of wheat for local requirements is determined by the Board. Free movement of wheat within Australia has been stopped and deliveries of wheat must be made to licensed receivers who are the receiving and distributing agents of the Board and by whom sales are made to the usual retailers. The Board has an Australian Selling Committee in London which negotiates sales of wheat and flour in the United Kingdom, and other markets.

The Commonwealth acquired 1938-39 crop wheat still in Australia, and has acquired each war-time crop. A Pool is created for each season, and payments made to growers. Advances are made in anticipation of sales under guarantee by the Government.

In 1940, a Wheat Industry Stabilization Plan was introduced under which wheat farms were registered, and growers licensed. The acreage sown was controlled and a guaranteed payment of 3s. 10d. a bushel f.o.b. for bagged wheat assured. This applied to the 1941-42 crop.

For later crops a Quota Plan based on payment of 4s. a bushel bagged basis for the first 3,000 bushels produced by a grower was introduced, but other features of the stabilization plan were not altered. Non-quota wheat receives the Pool return.

**11. Barley.**—The outbreak of War came a few weeks prior to the commencement of harvesting operations for the new barley crop, the estimates for which indicated that production would be on a higher scale than in former years.

An Australian Barley Board, representative of the industry, was formed with head-quarters at Adelaide, and the Commonwealth Government acceded to its request to acquire the entire barley crop, which was placed under the control of the Board. A pool was established from which proceeds were distributed with appropriate margins for different grades of barley.

The Board is responsible for the marketing and storage of barley, and, like the Australian Wheat Board, has appointed its licensed receivers in all States to receive grain on its behalf and to act as agents for all local and overseas sales.

The Commonwealth decided not to acquire barley in the smaller producing States after 1941-42, but control was kept by the Board in South Australia and Victoria. Western Australia and Queensland then established State Barley Boards to control marketing in these States.

The 1939-40 crop was a record one of 15,600,000 bushels, but the 1940-41 crop, because of drought, was below normal. Barley of the first two pools has all been sold, and satisfactory payments have been made to growers.

The 1941-42 crop was over 18,000,000 bushels exceeding the previous record crop of 1939-40, but in 1942-43, the crop fell to 8,278,000 bushels.

**12. Potatoes.**—The Australian Potato Committee was set up under National Security (Potatoes) Regulations on 27th April, 1942, the purpose being to ensure that adequate supplies of potatoes would be available in Australia to meet the needs of the Defence Forces and the civilian population during the war.

Very heavy crops and extremely low prices in 1940-41 were followed by a 20 per cent. reduction in acreage and poor yields in 1941-42, while the war with Japan resulted in increased demands from the Defence Forces for their rations and stocks.

Planted acreages have been as follows :—

Six years average to—

1940-41	Uncontrolled	..	..	..	118,692 acres
1941-42	„ „	..	..	..	102,173 acres
1942-43	Controlled by Committee	Australian	Potato	{	142,042 acres
1943-44					187,000 acres
1944-45					278,000 acres (Target)

Control became necessary to ensure proper distribution, and fair prices to producers.

There are two aspects of control :—

- (a) Production of the quantity required ;
- (b) Equitable distribution of supplies.

Production has been increased substantially, but increasing demands, combined with seasonal fluctuations, make it necessary to keep the acreage at the maximum attainable.

Distribution control is required because of the mounting demand, the need to meet sudden Defence requirements, need to avoid unnecessary transport, and the need to give, as far as possible, an adequate supply for the civilian population throughout the year. The crop is seasonal, and supplies are regulated on to the market so as to minimize the alternation of over-supply and scarcity, which was usual in peace-time. This cycle of over and under-supply of an essential foodstuff would, under present conditions, become a regular feature without control of the market.

For production price is an important feature. The Committee first assured a reasonable price to growers by giving a guaranteed minimum price, and allowing growers the benefit of the market price where it exceeded the minimum.

The foregoing was altered after one season to a fixed contract price. The guaranteed minimum frequently resulted in the most profitable market, being one to which potatoes should not be sent either because of transport difficulty, cross traffic, or needs of a less profitable market. Under the contract system the price to growers is fixed and supplies are directed according to needs rather than market rates.

Control involves close co-operation with State Departments of Agriculture, which arrange contracts with growers, and supervise grading when crops mature. In marketing existing channels are employed for receiving crops, paying growers and arranging distribution to the public and services.

The Committee functions through an Executive Member, who is the Potato Controller. There are Deputy Potato Controllers in each State who exercise control within the State. They are assisted by Advisory Committees representing Departments of Agriculture, growers, merchants and Commonwealth Departments. Wholesale merchants form a Distribution Committee, and appoint a Distribution Manager who acts under the control of the Deputy Potato Controller. When supplies are plentiful they flow freely through these channels ; when they are scarce supplies are spread evenly by a quota system to merchants.

Supplies from growers are controlled by quotas for delivery which are used to encourage, or discourage, the flow on to the market, as required. This regulates the supply from the field while giving each grower a fair share of the market. The system is used also to ensure that crops in danger of being lost are marketed quickly.

Potatoes are one of the foodstuffs subsidized under the Commonwealth Price Stabilization policy. They are sold retail well below the contract price to growers, and the Committee acts as the medium for carrying into effect the Government policy concerning retail prices of potatoes.

13. **Dried Fruits.**—Contracts\* were entered into with the United Kingdom Government which provide for the disposal of portion of the exportable surplus of the 1940 pack of dried vine fruits. Advances of 80 per cent. are payable to exporters on shipment and the final payment of 20 per cent. on landing weights after inspection and approval.



The United Kingdom Government also purchased the available surplus of the 1942 pack, but the price was fixed on an f.o.b. basis instead of delivery to warehouse. Although a flat rate was paid by United Kingdom for each kind of fruit, arrangements were made whereby payments to growers were adjusted to ensure a premium on fruit above the basic grade.

In 1943 supplies of dried fruits were allocated amongst the various requirements by the Combined Food Board which includes representatives of the Governments of United States of America, United Kingdom, Canada, Australia, Union of South Africa and New Zealand. The United Kingdom Government again purchased the available surplus on an f.o.b. basis.

Contracts were entered into with the Governments of the United Kingdom and Canada, and also with the Importers of New Zealand for the purchase on an f.o.b. basis of practically the whole of the exportable surplus of the 1944 pack of dried vine fruits.

The quantity sold to each of these countries was in accordance with the allocation made by the Combined Food Board at Washington, United States of America.

**14. Hides and Leather.**—Late in 1939 it became necessary to introduce a scheme for the control of the marketing of hides and leather and suitable action was taken by Regulations under the National Security Act. The Australian Hide and Leather Industries Board was appointed to administer the scheme.

All cattle hides and yearling and calf skins were to be submitted for appraisalment in accordance with a Table of Limits prepared by the Board. On appraisalment they were acquired by the Board acting on behalf of the Commonwealth and thereupon became the property of the Commonwealth. The owners of the hides and skins immediately prior to acquisition, received compensation at varying rates determined by the Minister from time to time. Hides and skins acquired by the Board are sold on behalf of the Commonwealth. Tanners' purchases of hides are regulated and exports of hides, skins and leather are controlled.

When the scheme commenced, hide export prices were much higher than the domestic appraised prices. About the middle of 1940, however, the oversea market for hides and skins collapsed. The scheme stood the strain of the reversed position. Appraisalment continued as before, the rates of compensation to hide owners were reduced by 25 per cent. for a time and the fund already built up by the Board acted as a cushion for the change-over period.

The export price position later improved and continued to improve to such an extent that, about the end of 1941, the healthy position of the Board's funds enabled compensation to the original owners of hides to be paid at the rate of 110 per cent. of the appraised prices. The exceptionally heavy demand for hides for the production of leather necessary to produce large quantities of military boots has resulted in a demand by Australian tanners for hides which exceeds Australian hide production. A special arrangement was entered into with the New Zealand Government for the purchase of New Zealand hides, and additional quantities have been sought from other sources of supply. The exportation from Australia of leather suitable for the production of military boots is prohibited.

**15. Rabbit Skins and Hats.**—A marketing control scheme for rabbit skins was introduced under the National Security (Rabbit Skins) Regulations on 10th June, 1940. After the outbreak of War, rabbit skin prices rose sharply owing to the keen demand from overseas. In order that the prices of military and civilian hats in Australia might be kept at reasonable levels and that sufficient skins should be available to Australian hat manufacturers at prices which would enable them to produce hats at those price levels, a scheme of marketing control became necessary.

The Australian Rabbit Skins Board was appointed to administer the scheme. The basis of the scheme is the payment to hat manufacturers of compensation equivalent to the difference between appraised prices in a Table of Limits prepared by the Board, which are based on a Commonwealth Prices Commission determination, and ruling open market prices.

Funds for the payment of such compensation are provided by collections from a levy imposed on the export of rabbit skins under the Rabbit Skins Export Charges Act 1940. Since 1941 rabbit-skin prices have been extraordinarily high. The rate of export levy has fluctuated on a number of occasions according to the state of the Board's finances. In some periods the levy was entirely suspended, whilst the highest rate it has reached has been 18d. per lb. In order that compensation payments should be kept as low as possible, the quantities of rabbit skins, which hat manufacturers may buy at appraised prices, are closely regulated. Investigations into the operations of all Australian hat manufacturing establishments have enabled the Board to do this, although the position has been complicated by the heavy demand for military fur felt hats.

**16. Sheepskins.**—In April, 1940, the United Kingdom Government agreed with the Commonwealth Government to acquire the "exportable surplus" of woolled sheepskins in Australia.

The "exportable surplus" is determined by competition at auction between Australian fellmongers and export packers licensed in terms of their pre-war trade in such product.

The price of the woolled skins is fixed by appraisalment under the Sheepskin Table of Limits, which takes into account the following factors:—

- (a) The wool content—the value of which is fixed in relation to the "scoured skin wool" section of the Wool Table of Limits;
- (b) The value of the pelt—which is reviewed quarterly; and
- (c) The cost of fellmongering the skins.

**17. Tobacco.**—The Australian Tobacco Board was constituted under National Security (Australian Tobacco Leaf) Regulations, promulgated on 9th May, 1941, for the purpose of facilitating and regulating the marketing of Australian-grown tobacco leaf. The Board consists of a Commonwealth Government representative as Chairman, five members representing the growers, two members representing tobacco manufacturers, and two members representing the brokers engaged in selling local leaf.

All Australian produced tobacco leaf must be submitted to the Board for appraisalment in accordance with the regulations. An Appraisal Committee consisting of a broker's appraiser acting on behalf of the growers, a manufacturer's appraiser, together with a Government Arbitrer, determined the grade and value of the leaf in accordance with an approved table of limits. Appraisements are carried out each season at Brisbane, Melbourne and Perth.

## § 15. The National Safety Council of Australia.

The National Safety Council of Australia was founded in Melbourne in 1927 for the purpose of developing, mainly by means of education safety on the road, at work and in the home, and its activities have developed in other directions wherever the need for reducing the toll of accidents has been shown. In various States it issues by courtesy of the Traffic Authorities a booklet with every motor driver's licence, and conducts continuous propaganda through the press and other sources. It also forms Junior Safety Councils in the schools for developing a safety conscience among children. The children themselves are officers of these Councils and patrol the roads in the neighbourhood of the schools and conduct the scholars across in safety. Posters are available to schools at cost in connexion with Health and Safety lessons in the schools. Small films specially taken are available for children's and home safety instruction.

A "Safe Driving" campaign for individual motor drivers is conducted as well as a "Freedom from Accidents" competition among employee drivers, those completing a year free from any accident for which they are responsible being given a certificate to that effect. An Industrial Service of four posters per month, together with slips for pay envelopes, constitutes a regular service for the dissemination of safety advice, and was supplied to over 100,000 workers in factories last year. Committees deal with specific problems regarding traffic, films, safety in industry, air safety and home dangers. The Air Safety Committee has issued a 32-page booklet "Air Sense" for distribution with "A" pilots' licences through the Civil Aviation Department and has a plan for emergency night landings for aircraft in difficulties.

The Council is supported by a Government Grant, public subscription and sales of service, and is a non-profit organization. Its work is carried on by a small paid staff controlled by committees and governed by an executive. The following committees, whose work is of an entirely honorary nature, are in operation, namely, Traffic, Industrial Safety, Home, Air Safety and Propaganda.

### § 16. League of Nations.

Australia was one of the original signatories of the Treaty of Versailles of 28th June, 1919, under which the League of Nations was established, and thus became a Member of the League and its kindred organizations—the International Labour Organization and later the Permanent Court of International Justice. On 22nd October, 1933, Australia was elected a non-permanent member of the Council of the League of Nations for a period of three years, and was succeeded by New Zealand in September, 1936. South Africa was elected in the place of New Zealand in December, 1939.

The last elections to the Council were held in December, 1939. At that date only two permanent members of the Council remained, namely Great Britain and France.

The course of the war, especially the events of May and June, 1940, brought the political activities of the League practically to a standstill and made the maintenance of the technical sections increasingly difficult. After a period of negotiation, in the course of which the Secretary-General, M. Avenol, resigned, it was decided to transfer some of the technical branches of the League to the Western Hemisphere. Thus, while the Head-quarters of the League nominally remained at Geneva, the International Labour Organization accepted the offer of the Canadian Government to provide accommodation at the McGill University, Montreal, the Economic, Financial and Transit Department of the League moved the greater part of its staff to Princeton, United States of America, and the Permanent Central Opium Board and the Drug Control Service established branches at Washington. The Health and Social Sections of the League, however, have carried on their work from Geneva. As a result of the occupation of Holland by the Germans, the Permanent Court of International Justice was unable to function. The president and registrar of the Court took up their residence in Switzerland.

In a report on the work of the League in 1941–42, the Acting Secretary-General, Mr. Sean Lester, pointed out that the League itself and all its dependent organizations have been kept in existence and are ready at the appropriate moment to take their respective parts in the reconstruction of the world or to serve as the foundations on which the new order can be built.

The Assembly and the Council have met only once since the war began. A special Conference of the International Labour Organization was, however, held in October and November, 1941, and the 26th Session of the International Labour Organization Conference met at Philadelphia on 20th April, 1944. The Honorable J. A. Beasley, M.H.R., and Messrs. H. C. Barnard, M.H.R., P. J. Clarey, M.L.C. and H. C. Condi, attended the Conference as Australian Delegates.

Notices of withdrawal and the occupation of certain countries adversely affected contributions to the League's budget. Budgetary retrenchments have been considerable, reducing the budget by almost two thirds. The Australian Government has continued to support the League financially.

### § 17. War Service Homes.

The operations of the War Service Homes Commission at 30th June, 1943, may be set out briefly as follows :—Applications approved, 44,942 ; expenditure on provision of homes, purchase of land for future use, etc., £29,969,994 ; 21,371 houses had been completed ; and 34 homes had been enlarged.



In addition, the Commission had purchased on behalf of eligible applicants, 13,003 already existing properties, and had taken over mortgages existing on 3,041 dwelling-houses. Dual assistance had been approved in respect of 38 applications, making the total number of homes provided under the War Service Homes Act, 37,487. Homes are insured under a comprehensive policy, the total insurances in force, including cover notes, amounting to £18,389,550. The total receipts of the Commission to 30th June, 1943, were £31,729,754, of which £12,022,828 was paid to the National Debt Sinking Fund. Arrears of instalments outstanding at the close of the year were £501,663, or 1.83 per cent. of the total instalments due.

In April, 1941, the War Service Homes Act was amended to provide for the granting of assistance to certain classes of eligible persons, and their dependants, in respect of service during the war which commenced in 1939.

### § 18. Daylight Saving.

Daylight saving during summer time was introduced throughout Australia by the Commonwealth Government under the National Security Regulations. Summer time was fixed at one hour in advance of standard time in all States from 2 a.m. on 1st January, 1942, to 2 a.m. on 29th March, 1942, and from 2 a.m. on 27th September, 1942, to 2 a.m. on 28th March, 1943, and in all States, except Western Australia, from 2 a.m. on 3rd October, 1943, to 2 a.m. on 26th March, 1944. At the Premiers' Conference held at Canberra in August, 1944, it was decided that ordinary time should be observed during the 1944-45 summer.

### § 19. Commonwealth Food Control.

1. **General.**—It is convenient to consider Australia's War-time Food Production and Control in two periods or under two phases. Under the first phase come the effects on Australia's agriculture of the Second World War up to the outbreak of hostilities with Japan, while under the second phase we consider the fundamental changes wrought by the entry of Japan into the war.

The main effect of the outbreak of war was to raise problems of surplus production. The onset of the war found Australia reasonably well prepared in this direction and generally speaking the farmer was able to continue production without interruption.

Australia began in 1938 to prepare for food control in the event of war, not only to safeguard her economy, in which exports have always occupied an important place, and to protect primary producers against market collapse, but also to ensure that essential supplies moved quickly to the United Kingdom. Plans were laid then for mass marketing to replace individual enterprise, and understandings were reached that as far as shipping was available, the United Kingdom would take the export surpluses of most of our principal foods.

It is not difficult to understand the acute problems which followed the restriction of shipping space for our exports. Surplus foodstuffs were a worry for two years. The primary producer was supported, but in this general situation little attention was paid to maintaining labour supply in rural industry, providing essential agricultural machinery, etc., and production consequently tended to decline.

In viewing the second phase we again find that Australia was well prepared from some aspects. The possibility of Japan entering the war was considered, and in 1940 the Emergency Supplies Plan was adopted to take care of civilian food supplies in the event of invasion, hostilities on the mainland, and the consequent dislocation of internal transport. Reserve stocks of selected foods were placed in all grocery stores throughout Australia and special Government stores were established in many places for civil or Service use. While it has never been used as an emergency measure the Plan has been most valuable in many ways. It was always a sound precautionary measure and has greatly assisted in ensuring the regular flow of civilian supplies.

Apart from the Emergency Supplies aspects, however, there were the immediate and far-reaching effects of a large increase in the size of Australia's Defence Forces and the arrival of substantial American Forces. These meant that enormously increased supplies were required in Australia itself and in the nearby Islands. At the same time British demands became more urgent than formerly, especially for butter and meat, because of the diversion of American food supplies to Russia. Instead of problems of surplus production, Australia now had to face problems of shortage, and plans were made to maintain and increase production to meet present commitments and to prepare for greater future commitments. Indeed, it was not long before Australia, for the first time in her history, had to face the prospect of restricting her own food consumption in order to share her supplies with other countries.

2. **The Establishment of the Commonwealth Food Control.**—In May, 1943, the Commonwealth Food Control was established under the Minister for Commerce and Agriculture to develop the machinery necessary to cope with the situation and to implement a thoroughgoing food policy. The Secretary of the Department of Commerce and Agriculture, J. F. Murphy, C.M.G., became Controller-General of Food, and he has received special powers under the National Security Act. (S.R. 1943, No. 165.)

3. **Policy and General Organization.**—Overall direction of food policy is now in the hands of Production Executive and the Food Executive of Cabinet. Within the actual food control administration the principal activities are agricultural production, factory production, procurement of food for the Services, and the inspection of factories and foodstuffs, export policy, control and direction of exports, Commerce Act inspection of export goods, and collaboration with the British Food Mission, United States army specialists, and marketing boards.

4. **Agricultural Production.**—Agricultural production is organized through the Director-General of Agriculture and the State Departments of Agriculture. For co-ordination of policy the Australian Agricultural Council functions under the chairmanship of the Minister for Commerce and Agriculture, and the Standing Committee on agriculture works with the Agricultural Council.

The principal forms of responsibility reposed on the Commonwealth Food Control in respect of agricultural production are:—

- (a) Co-operation with the States in the organization of agriculture for the special purpose of war-time production. This is done through the State Departments of Agriculture and the District War Agricultural Committees.
- (b) The organization of man-power for all urgent agricultural purposes.
- (c) The production and use of agricultural machinery of all kinds.
- (d) The direction of production generally, with special emphasis on products in short supply such as vegetables and milk for all purposes.

The special problems of production of various crops and live-stock products involve questions relating to the use of animal foodstuffs, fertilizers and seed, the provision of adequate man-power and machinery, and the general organization of the agricultural industries so that the best will be obtained from the resources available.

5. **Food Processing.**—Food processing factories are numerous and varied in their scope, particularly in New South Wales and Victoria. All the principal branches of food processing, viz., cereal foods, meat products, dairy products, fruit products, vegetable products, are subject to control and direction.

A Division in the Food Control Organization deals with all branches of factory production of food. This Division is responsible for securing from the existing factories the maximum output, by overcoming current obstacles to full production, such as man-power difficulties and delays in securing materials essential to production; rendering technical service and planning future expansions of factories and the establishment of additional factories when the expected future demands so necessitate.

**6. Service Foodstuffs.**—To cope with the enormous demands for Service foodstuffs, a special section has been set up whose activities are confined to the procurement of foodstuffs to meet the demands placed on food control. The section covers demands for the Australian Forces and Ancillary Services, demands for such of the United States Forces as are being supplied from Australia and also to meet certain overseas commitments to the British Ministry of Food, etc.

All problems of production created by Service demands are dealt with in the division of the Food Control Organization relating to agricultural production, factory production, and technology and inspection.

**7. Civilian Foodstuffs.**—The distribution of food for use by the civil population is covered by Food Control in association, where necessary, with the Civilian Requirements Board.

**8. Inspection of Factories.**—The inspection of the output of factories, including the actual inspection of the factories themselves, is a function of the Department of Commerce and Agriculture.

The technological staff of Food Control makes analyses of food products continuously and gives considerable assistance to factories.

**9. Export Policy.**—The consideration of export policy, including the negotiations of Trade Treaties and the conclusion of international arrangements relating to food, is a normal function of the Department of Commerce and Agriculture.

**10. Co-operation with United States Authorities.**—There are many food specialists in Australia with the American Army. They comprise experts in agricultural production, agricultural engineering, and food canning and dehydration. The Food Controller is frequently in contact with the United States Army authorities in regard to the co-operation of these experts for advice on agricultural and factory production.

**11. British Food Mission.**—The British Food Mission in Australia is consulted on all matters concerning the export of food to the United Kingdom.

**12. Marketing Boards.**—All the marketing boards functioning under the Minister for Commerce and Agriculture, e.g., for wheat, dried fruits, canned fruits and dairy produce, work in close association with the Food Control Administration. The organization and functions of these Boards are covered in another section of the Official Year Book.

## § 20. Department of War Organization of Industry.

**1. Creation.**—To give effect to proposals outlined by the Prime Minister in introducing the Ministers of State Bill 1941, five new Departments of State were created under Section 64 of the Commonwealth of Australia Constitution on 26th June, 1941. The establishment of three of these Departments—Aircraft Production, Transport and War Organization of Industry—was the Government's response to evidences of strain in the national economy, following the superimposition upon normal civilian activities of a rapid expansion of production for war, and an equally rapid diversion of man-power from industry to the Armed Forces.

**2. Economic Background.**—Already, various Departments, acting either independently or in co-operation, had taken measures as occasion demanded, to ensure uninterrupted progress of programmes of war production, to safeguard the country's financial structure, or to conserve vital materials. The restrictions and controls implemented by them, however, could cover only limited and immediately related fields. The situation demanded an agency which could view economic problems of growing number and intensity relative to the economy as a whole, which could ensure maximum co-ordination of both public and private activities, and which could promote as rapidly as possible the full mobilization of the nation's economic resources for the purpose of waging total war. The Department of War Organization of Industry was created to undertake these responsibilities, but, owing in part to changes of Government, its organization was delayed and the Department did not begin active operations until December, 1941.



**3. Organization.**—It was soon apparent that in most of its immediate contracts with industry and in its administration of controls, State Offices of the Department were necessary, and by March, 1942, six Deputy-Directors had been appointed to control Branches established in the capital cities of the States, and subsequently offices were set up also at Launceston, Tasmania, and at Townsville, Queensland.

In the central administration in Melbourne, the Director-General is assisted by a Deputy Director-General, an Assistant Director-General and Assistant Directors administering each of six Divisions. The principal activities of these Divisions are:—

*Rationalization.*—New manufactures, transport, efficiency investigation, organization of non-rural industry, distribution and services.

*Rural.*—Production goals of rural products, and organization of rural industries in co-operation with Department of Commerce and Agriculture, and other Departments.

*Economics and Statistics.*—Research and statistical investigations for other divisions.

*Building and Construction.*—Building permits and priorities, and building materials control.

*Administration.*—Secretariat for Production Executive, drafting, administration and enforcements of Orders, establishment, accounts, library.

*Public Relations.*—Publicity.

There is also a Fisheries Co-ordinating Authority. Attached to the Department, but separately organized are the Scientific Liaison Bureau, with its head office in Melbourne and branches in each State, and the Universities Commission located in Sydney.

**4. Production Executive of Cabinet.**—On 6th November, 1941, the Prime Minister announced the completion of arrangements for the establishment of the Production Executive of Cabinet—the economic counterpart of the War Cabinet—"because of the need of a settled policy and a workable plan in regard to (a) man-power; (b) production resources; and (c) financial resources". The Minister for War Organization of Industry is Chairman; the other members are the Treasurer, and the Ministers for Supply and Shipping, Munitions, Trade and Customs, Labour and National Service, Commerce and Agriculture, Transport, and Aircraft Production. The Production Executive deals generally with economic matters not requiring the attention of Full Cabinet. Several of its members are also members of War Cabinet and thus there is effective liaison between both Cabinet bodies.

**5. Functions of Department.**—As the Executive Department of Production Executive, the Department of War Organization of Industry provides its Secretariat, supplies the machinery for its proper functioning and is responsible for the implementation of its decisions by the Departments concerned. All the work of the Department is essentially the concern of Production Executive, which must approve all proposals for war-time re-organization of industry before effect can be given to them. These plans emerge in the discharge of the general functions of the Department, which are:—

(a) Planning and co-ordinating measures for organizing the industrial resources of the nation to achieve maximum production of essential needs;

(b) Diversion of labour, plant and material resources from non-essential to essential production by the re-organization of primary and secondary industries and commerce; and

(c) Co-ordination of efforts of various civil Commonwealth Departments to ensure that the maximum energies are being devoted to the production of war needs and essential civilian requirements, and that there is an appropriate distribution of functions relating to these activities.

**6. Progress in War Organization.**—It is possible within this small compass to give only a few examples of directions in which progress in the organization of industry for war has been achieved. The Minister for War Organization of Industry was responsible for the Cabinet submission which led to the establishment of the Man-power Directorate clothed with authority to utilize the nation's man-power to the best possible advantage, and later, for the creation of machinery for the review of war commitments in the light

of Australian resources, particularly of man-power. In advising the Man-power Directorate on the essentiality or otherwise of civilian enterprises, the Department has promoted the co-ordination of man-power policy with the maintenance of activities essential to the prosecution of the war and the civil needs of the community. By the prohibition of non-essential production, diversion of men and materials to nationally important production and services was secured.

Substantial progress has been made in the rationalization of industry, under which heading may be included arrangements for specialization, elimination of unnecessary varieties of goods, simplification—packaging, clothes styling—control of interstate transport, zoning—bread, milk, ice, etc.—and the institution of inter-departmental control over specific forms of production, controls over materials, and the regulation of building activities. As the result of rationalization in these various forms very substantial resources of labour, plant, machinery premises, and transport facilities have been diverted from non-essential to essential activities.

In its approach to the re-organization of industry, the Department has sought the voluntary co-operation of industrialists, and in many cases statutory sanctions have been unnecessary. In all cases where appropriate, the Trade Unions have been accorded an effective voice in the formulation of plans for rationalization. Certain controls because of their nature, such as controls over materials, building transport and new manufacture, are implemented by Orders under National Security Regulations, whilst others, like zoning, though implemented by Orders, have been formulated in consultation with representatives of employers and employees engaged in the industry concerned.

Rural production goals were established at the Department's suggestion and with its assistance. These goals, designed to take account of all essential requirements—civilian, Defence services, and export—provide the basis for the organization of rural and food processing industries including allocations of labour, fertilizers, machinery, etc. Augmentation of local fish supplies is the object of the Fisheries Co-ordinating Authority, which endeavours to meet all requirements of man-power, equipment, boats, liquid fuel and fishing gear.

**7. Co-ordination of Governmental Activity.**—The Department of War Organization of Industry is the focal point of reference for the effective co-ordination of activities by Government departments in the application of restrictions and controls. By means of conferences, committees and personal contact between officers, success has been achieved in the discussion and adoption of measures by Departments for the furtherance of the war effort with the minimum disturbance to the economic life of the community.

**8. Price Stabilization.**—The Commonwealth Prices Commissioner, the Secretary of the Treasury, and the Director-General of War Organization of Industry constitute the Price Stabilization Committee to implement the policy of price stabilization announced by the Government on 12th April, 1943, whereby unavoidable increases in costs are met, where necessary, by Treasury subsidies.

Responsibility rests with the Department of War Organization of Industry to harmonize this aspect of price stabilization with the general policy of war organization. In addition to investigating production priorities, the Department advises the Price Stabilization Committee on the possibility of offsetting increases in costs by a higher degree of efficiency in production, including savings due to rationalization. These investigations are undertaken by a special Efficiency Investigation Section of the Department, comprised of business men and cost accountants in association with technical advisers. Co-ordination between the activities of these officers and officers of the Prices Commissioner is effected by an arrangement whereby cost investigations for the Section are undertaken jointly with and normally carried out by the Prices Branch.

**9. Civilian Requirements Board.**—In the critical period when war developments in the Pacific threatened Australia directly, it was imperative to strengthen the Armed Forces and expand fighting equipment and supplies to the limit. The national emergency demanded subjugation of civilian interests and with suspended production, existing stocks of many types of goods essential to the life of the community, either

fell into short supply or became entirely unobtainable. Rationing of clothing and certain foodstuffs was introduced to restrict consumption and promote equity in distribution of available supplies, but this step of itself could not restore the general supply situation.

In July, 1943, the Civilian Requirements Board was established with the responsibility of determining essential civilian needs, exploring the possibility of those needs being met, and of promoting fair distribution of available civilian essential supplies throughout Australia. The Board is comprised of representatives of the Department of War Organization of Industry, with the Deputy Director-General of that Department as Chairman, the Rationing Commission, the Controller-General of Food, and the Department of Post-war Reconstruction. It does not control production, but works closely with the production Departments and the Directorate of Man-power, thereby ensuring that such resources of materials, man-power and productive capacity as can be released from war production are applied to the satisfaction of civilian requirements of the greatest essentiality. Resumed production of certain household utensils and implements, and a programme of expanded manufacture of civilian clothing are examples of responses to the representations of the Board.

Civilian Requirements Committees—similar in constitution to the Board—have been established in all States and these, through local representatives in provincial and country districts are able to provide the Board with information regarding essential civilian supplies.

## § 21. Income Taxes in Australia.

1. *General.*—Income Tax was first levied in Australia by the State of South Australia in 1884, and was adopted by the other States in succeeding years, the last being Western Australia in 1907. The Commonwealth first imposed income tax for the financial year 1915-16, the tax being based on incomes derived during 1914-15. Commonwealth and State income taxes were collected independently under acts which differed widely in principle.

2. *Development of Commonwealth and State Income Taxes.*—(i) *Historical.* In 1923 agreements were entered into between the Commonwealth and all States except Western Australia, under which the Commonwealth tax was collected by the State Department. In Western Australia the Commonwealth Department collected the State income tax. A joint form of income tax return for both Commonwealth and State purposes was used in all States.

The revenue difficulties of governments during 1929-30 and subsequent years led to the imposition by all Governments except that of South Australia of special taxes on income in addition to the ordinary income tax. These taxes were variously described as Unemployment Relief, Financial Emergency, Special Income, etc., and differed widely in principle from the ordinary income tax. In general, they were imposed at a flat or very slightly progressive rate on gross income without allowance for family circumstances. The Commonwealth imposed a special tax on income from property.

Attempts had been made, since Commonwealth income tax was first imposed, to obtain a uniform assessment act for the Commonwealth and all the States and this was substantially achieved in 1936. The uniform act, however, related only to ordinary income tax and the differences which remained between the ordinary and special taxes in any one State were, in many respects, greater than those which had existed between the ordinary taxes of the Commonwealth and States.

In the three years up to 1941-42 three of the State special taxes were eliminated by amalgamation with the ordinary tax, and, in that year, New South Wales and Tasmania, as well as South Australia, levied only a single income tax. The Commonwealth, however, in 1941-42 imposed a special War Tax along much the same lines as the State special taxes.

In 1941 a Premiers Conference discussed the possibility of the Commonwealth levying a single income tax on behalf of the Commonwealth and the States for the duration of the war; but the proposals then made proved unacceptable. In 1942 the Commonwealth Parliament passed legislation providing for the imposition of a single uniform tax for the duration of the war and one year thereafter, and offering the States



£33,500,000 as compensation if they would agree to abandon the field of income tax. The validity of this legislation was upheld in the High Court and the offer was accepted by the States. In 1942-43 all State income taxes were suspended until after the war and only the uniform income tax was levied.

A Joint Parliamentary Committee under the chairmanship of the Treasurer (Hon. J. B. Chifley) was appointed on 10th February, 1944, to inquire into the adoption of the "pay-as-you-earn" method of taxation. The Committee recommended that this method be adopted and that tax for any financial year be based on the income of that year. Under the previous system tax payable in any financial year was based upon the income of the previous year. The recommendations of the Committee were adopted by Parliament in the Income Tax Assessment Act 1944, which was assented to on 3rd April, 1944.

(ii) *Assessment and Collection of Tax.* Prior to 1930 Commonwealth and State income taxes were assessed and collected as follows:—The taxpayer was required to lodge a return of income by 31st July of each year (31st August for business income) showing the income derived from each source during the twelve months ended 30th June, together with any deductions or allowances claimed. The return was checked and the tax payable was assessed. Notices of assessment were sent to the taxpayer as completed (in most cases from January to June following the lodgment of the return). The due date for payment of the tax shown on the notice of assessment was within a few weeks of the receipt of the notice and additional tax was charged if payment was not made by the due date. The tax shown on the notice of assessment was expressed as being in respect of the financial year following the year of income on which the tax was based. Thus tax based on the income of any given year was payable in a lump sum from six to twelve months after the close of that year. The method of collection from employees was progressively altered after 1930 to deduction at source from wages and salaries. Collection from non-employees continued unaltered until the adoption of "pay-as-you-earn" in 1944.

(iii) *Deduction at Source from Wages and Salaries.*—(a) *General.* In conjunction with the introduction of the special taxes and heavy increases in normal taxes at the beginning of the 1930 depression all States adopted a new method of payment by deduction from wages. The deduction system was extended in several States to cover ordinary taxes as well as the special taxes.

Under this method deductions were made from all wage and salary payments in accordance with a published schedule showing the amount to be deducted from each weekly payment. The wage-earner received stamps in lieu of the sums deducted. In some States, however, large employers were permitted to make the deductions and remit the sums so deducted direct to the Taxation Department. The employee on request received a certificate showing the amount which had been deducted.

(b) *"Wages Tax" System.* The moneys so deducted were applied towards meeting income taxes due in two ways. Under the "wages tax" system (adopted in full in New South Wales) the deductions were the final payment of tax on the income. A taxpayer was not required to lodge a return unless he had either income from non-wage sources or was liable to pay ordinary income tax. If a return was lodged, the non-wage income was assessed to special tax in the ordinary way and the whole income was assessed to ordinary tax if the taxpayer was liable. Under the "wages tax" system the tax on wage income was actually paid week by week in the year in which it was earned while the tax on non-wage income was paid in one amount six to twelve months after the close of the year of income. When the "wages taxes" were first introduced only the non-wage income of the previous year was assessed to tax, while tax from wages was collected from wages earned in the current year. The New South Wales special tax was of the "wages tax" type and the Queensland and the Western Australian special taxes closely approximated to it.

(c) *"Instalment" System.* The second method of applying deductions from wages to meet tax was the "instalment" system. Under this method the deductions were regarded as instalments towards meeting the lump sum payment due six to twelve

months after the close of the year of income. When the taxpayer received his notice of assessment he presented to the Taxation Department all the tax stamps or deduction certificates he held at the time, irrespective of the date at which the deductions were made. Any excess of tax due over the deductions made had to be paid in cash, while any excess of deductions was refunded in cash. Under this method the deductions were simply an advance payment of tax and were only an approximation to the actual amount of tax payable. The instalment system was used by Victoria for both ordinary and special taxes, and by South Australia for the one State income tax.

(d) *Commonwealth Instalment Deductions.* The Commonwealth adopted the instalment system of deductions from 1st January, 1941, concurrently with the extension of the tax to lower incomes, and a joint system of Commonwealth and State deductions was established in all States except Western Australia. Deductions made could be applied either in meeting Commonwealth or State taxes.

In 1941-42 deductions from wages and salaries commenced on 1st August, 1941, and continued until the assessment based on income earned during 1940-41 was paid between January and June, 1942. All deductions made up to the due date of payment were applied to meeting the tax payable and any difference was either paid in cash or refunded. The employee then received an exemption certificate exempting him from deductions till 31st July, 1942. The deductions were thus spread over about 40 weeks, the rate of deduction being calculated to approximate to the full tax payable. Exemption certificates were also issued to those employees whose return of income lodged in July, 1941, showed that they would not be liable for any tax in 1941-42.

(e) *Continuous Deductions.* The instalment system was modified on 1st April, 1943, to provide for deductions being spread over the full 52 weeks instead of only 40 weeks. In addition the concept of a "deduction year" was introduced. Under this system deductions were continuous throughout the year, and all deductions made at any time up to the due date of payment of the assessment could be applied to meeting the tax due. If the deductions were insufficient to meet the tax, the balance was paid in cash; but if the deductions exceeded the tax due, only the excess of deductions, made up to 31st March of the year following the year of income, over the tax based on income of that year was refunded. Deductions made between 1st April and the due date of the assessment (i.e., for up to three months for some taxpayers) were retained to be applied to meet the tax due in the following year and a certificate of credit was issued showing the amount retained. Interest at 2 per cent. per annum was allowed on these certificates. Exemption certificates were issued for the period up to 31st March following any income year in which the income earned was insufficient to render the taxpayer liable to income tax.

Under this system the rate of deduction from 1st April was based on the rates of tax imposed on assessments to be made in the following financial year. Previously increased rates of tax were not reflected in deductions until 1st August.

(f) *Pay-as-you-earn.* Under the pay-as-you-earn proposals, adopted in April, 1944, the method of applying deductions to meet tax assessed was altered substantially and certain changes were made in the method of making deductions.

Deductions made from 1st April, 1943, to 31st March, 1944, were applied, under the old system, to meet tax assessed on income of the year ended 30th June, 1943. Under the pay-as-you-earn scheme deductions from 1st April, 1944, to 30th June, 1944, will be applied to meet tax on income of the year ended 30th June, 1944, and deductions from 1st July, 1944, to 30th June, 1945, will be applied to meet tax on the income of that year. From 1944-45 the deduction year coincides with the income year instead of being nine months behind it.

The group scheme of deductions has been extended to cover most employers with more than ten employees. These employers make deductions from each pay in accordance with the published schedule, remit the proceeds to the Taxation Department, and after 30th June each year give each employee a group certificate showing the amount of deductions made during the year. When the employee receives his assessment he uses the group certificate in payment or part payment of his tax. Any excess of the group certificate over the assessment is refunded and any deficiency is payable in cash.



The stamp scheme of deduction has been modified to provide for the use of a stamp deduction card in two parts. Each four weeks the employer purchases stamps (also in two parts) for the amount of the deductions made each pay day and sticks one part on each half of the card. At the end of the year the employer gives the employee one half of the card and sends the other half to the Taxation Department. The employee's half is then used in the same way as a group certificate.

3. **Collection from Non-employees.**—Under the pay-as-you-earn system payment of tax by non-employees in one amount will be continued but the nature of the payment has been altered. The notice of assessment (usually issued about nine months after the end of the income year) will show the amount of provisional tax payable on the income of the current year. This provisional tax is an approximation to the tax which will prove to be payable after the return of income for the current year has been lodged. It will be ascertained by assuming that the income of the current year will be the same as that for the previous year (for which a return has already been lodged). The notice also shows the net adjustment between the provisional tax for the previous year and the tax finally assessed on the income of that year. The total amount of tax shown on the notice is payable in one amount within a few weeks of receipt of the notice.

Employees with income in excess of £50 from sources, other than wages or salary, will be required to pay provisional tax on that other income.

4. **Pay-as-you-earn Adjustments in 1944-45.**—(i) *Salary and Wage Earners.* The return of income for the year ended 30th June, 1944, will be assessed in the normal way but in most cases 75 per cent. of the tax assessed will be rebated. Employees' group certificates or stamp deductions for the three months 1st April to 30th June, 1944, will be approximately equal to the tax payable.

(ii) *Non-employees.* An amount equal to the full tax on income of the year ended 30th June, 1944, will be payable by non-employees as provisional tax for 1944-45, and will be subject to adjustment when tax on income of the year ended 30th June, 1945, is finally assessed. The tax on income of the year ended 30th June, 1944 (in most cases 25 per cent. of the full tax) will be payable in three equal instalments which will be included in the notices of assessment for 1944-45, 1945-46 and 1946-47. The notice of assessment for 1944-45 will therefore show full tax on income of the year ended 30th June, 1944, as provisional tax for 1944-45, and one-third of 25 per cent. of the tax on that year as a first instalment of tax finally assessed for that year. The notice issued in 1945-46 will show full tax on income of the year ended 30th June, 1945, as provisional tax for 1945-46, an adjustment equal to the difference between provisional tax paid for 1944-45 and tax finally assessed on that year, and the second instalment of tax on income of the year ended 30th June, 1944.

If the income of the year ended 30th June, 1944, exceeds £500 and exceeds the income of the previous year by more than 20 per cent. the rebate of 75 per cent. of the tax is limited to 75 per cent. of the tax on what the income of the year ended 30th June, 1944, would have been if no abnormal items of income had been included.

5. **Assessable Income.**—Income tax in Australia is levied, primarily, on all income derived from Australian sources by any person, rather than on income derived from all sources by Australian residents. Thus a non-resident is taxed on all income derived from Australia while a resident is, in general, not taxed on income other than dividends derived from overseas (provided the income is taxed in the country in which it is derived).

Certain types of Australian income are exempt from tax in Australia, the most important being income from gold-mining and a small amount of tax-free interest on Commonwealth Government securities. The value of a house occupied by its owner is not assessable income. Profits derived from the sale of property are not assessable income if such property was not purchased with a view to resale at a profit.

Assessable income is divided into two main groups—personal exertion and property. Personal exertion income includes all wage, salary, business and professional incomes, while property income includes all rents, dividends and interest. Property income is taxed at higher rates than personal exertion income in all cases where the total taxable income exceeds £200.



Expenses incurred in earning income, certain subscriptions to business associations, trade union dues, War Damage Insurance and certain A.R.P. expenditure are allowable deductions. Losses incurred in previous years may be carried forward as a deduction.

**6. Rebates of Tax.**—No deductions from taxable income are made for dependants but rebates of tax are allowed. The rebate of tax is calculated as follows :—Concessional allowances of £100 are made for a dependent spouse; mother; a housekeeper for a widower with children; and daughter-housekeeper for a widower without children. Concessional allowances of £75 are made for the first dependent child under 16 years of age; a child between 16 and 18 years of age receiving full-time education; or an invalid child aged 16 or over; and £30 for each dependent child under 16 years of age in excess of one. Dependent children under 16 years of age include any children (irrespective of relationship) actually dependent on the taxpayer. No allowance is made for dependent spouse if the separate income is over £50 per annum and if any dependant is only partially maintained or is maintained for less than the full year the allowance is reduced.

The rebate of tax is calculated by applying the personal exertion rate of tax on the taxable income to the amount of the concessional allowance. The rebate for dependants, however, is limited to £45 for dependants for whom the concessional allowance is £100 or £75 and £8 for the second and other children (for whom child endowment is payable).

The actual expenditure of the taxpayer on life assurance, superannuation and friendly society contributions (amount limited to £100); medical, hospital, pharmaceutical and dental expenses; funeral expenses (amount limited to £20); rates and land taxes on non-income producing property (including owner-occupied house); and gifts to charitable, benevolent or patriotic funds, is also treated as a concessional allowance. The amount allowed for dental expenses is limited to £10 for the taxpayer or any one of his dependants and for the whole group medical, hospital, dental and pharmaceutical expenses to £50 for the taxpayer or any one of his dependants. The rebate is calculated by applying the personal exertion rate of tax to the total amount of such expenditure.

A rebate of tax is also allowed at one-third the personal exertion rate of tax on amounts paid as calls to gold-mining, forestry and oil prospecting companies.

Interest on Commonwealth Loans issued prior to 1st January, 1940, is subject to the condition that it shall not be taxed at rates higher than those for 1930–31 and since present rates are higher in all cases, a rebate of tax of the difference in rates is allowed. Interest on Commonwealth Loans issued after 1st January, 1940, and certain State semi-governmental loans issued free of State income tax receives a rebate of 2s. in the £. This latter rebate is provided as being equivalent in value to the exemption from State income taxes, which are at present suspended under the Uniform Tax arrangement.

The rate of tax for farmers and pastoralists is determined by the average taxable income of the five years up to the current year, but the rate is applied to the actual income of the current year.

**7. Members of Forces.**—The following concessions in tax are given to members of the Forces :—

- (a) Deferred pay is exempt from tax, either as credited or when actually received;
- (b) Dependants' allowances (but not the member's allotment to dependants) are exempt from tax. At the same time the member receives the concessional rebate for dependants;
- (c) Active pay of members who serve outside Australia is exempt from tax;
- (d) Members serving within Australia are exempt from tax if the taxable income is less than £250. If the taxable income exceeds £250 the members receive a special deduction of £146 which diminishes as the income increases and vanishes at £587.

The income of a member of the Forces serving in Australia is the sum of his active pay and £44 per annum (the assumed value of food, clothing and quarters supplied).

Merchant seamen receive the special deduction allowed to members of the Forces serving in Australia.

8. **Effective Exemptions from Tax.**—The effective exemption limit from Commonwealth Income Tax before the war was £250 for a single man. State exemptions varied from £100 to £156. In 1940-41 (1939-40 income) the Commonwealth exemption was reduced to £200 and was retained at that level in 1941-42 for ordinary income tax. The special War Tax, however, was imposed on incomes over £156. The exemption was fixed at £156 for the first year of Uniform Tax (1942-43) but has been reduced to £104 for 1943-44 and 1944-45. The effective exemption in 1944-45 for taxpayers without dependants or with one dependant is £104. With wife and one child the effective exemption is £175, with wife and two children £211 and with wife and three children £257. These amounts are increased by the amount of concessional allowances other than for dependants.

9. **Taxes on Sample Individual Incomes.**—The following tables show the combined Commonwealth and New South Wales income taxes on taxpayers with varying incomes and numbers of dependants in the years 1938-39 to 1941-42 and the Commonwealth Uniform Tax in 1942-43 and 1943-44. The level of taxation in New South Wales approximated very roughly to the average of all States. Rates of tax for 1944-45 are the same as for 1943-44. For the majority of taxpayers, however, the pay-as-you-earn rebate of 75 per cent. of the tax on income of the year ended 30th June, 1944, will be allowed.

**TOTAL COMMONWEALTH AND NEW SOUTH WALES INCOME TAXES :  
1938-39 TO 1943-44.**

Income.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.
<b>INCOME FROM PERSONAL EXERTION.—TAXPAYER WITH NO DEPENDANTS.</b>						
£	£	£	£	£	£	£
100 ..	..	..	..	..	..	..
150 ..	..	4.1	..	..	..	10.5
200 ..	3.0	6.7	5.4	6.8	7.9	21.9
250 ..	5.8	10.0	14.0	17.1	19.2	36.7
300 ..	10.2	14.7	24.1	28.0	31.5	55.0
350 ..	15.6	20.0	34.1	38.6	44.2	75.1
400 ..	20.3	25.3	43.9	49.2	57.3	95.4
500 ..	31.0	37.4	65.1	75.1	84.8	136.7
600 ..	42.9	50.8	89.2	101.2	114.0	178.7
800 ..	69.9	81.3	146.3	161.2	179.4	265.4
1,000 ..	96.7	111.6	215.7	233.0	256.0	355.4
1,500 ..	181.0	202.0	440.0	466.0	495.0	619.0
2,000 ..	279.0	311.0	718.0	770.0	804.0	951.0
3,000 ..	515.0	623.0	1,315.0	1,563.0	1,599.0	1,747.0
5,000 ..	1,166.0	1,441.0	2,562.0	3,332.0	3,374.0	3,530.0

**INCOME FROM PERSONAL EXERTION.—TAXPAYER WITH DEPENDENT WIFE.**

£	£	£	£	£	£	£
100 ..	..	..	..	..	..	..
150 ..	..	..	..	..	..	3.5
200 ..	1.7	..	..	1.9	3.9	10.9
250 ..	4.5	8.7	7.4	3.8	9.6	18.3
300 ..	6.7	11.0	15.0	18.9	21.0	36.7
350 ..	11.7	15.8	24.8	29.1	31.5	53.6
400 ..	16.1	20.9	34.6	39.4	43.0	71.5
500 ..	26.2	32.3	55.0	63.7	67.9	109.3
600 ..	37.4	44.9	77.3	88.4	94.9	149.0
800 ..	63.2	74.1	131.4	145.0	157.0	232.2
1,000 ..	90.8	104.7	197.7	214.2	230.4	319.9
1,500 ..	173.0	193.0	415.0	440.0	462.0	578.0
2,000 ..	269.0	300.0	690.0	738.0	764.0	906.0
3,000 ..	502.0	607.0	1,285.0	1,520.0	1,554.0	1,702.0
5,000 ..	1,146.0	1,418.0	2,529.0	3,290.0	3,329.0	3,485.0

**TOTAL COMMONWEALTH AND NEW SOUTH WALES INCOME TAXES:**  
1938-39 TO 1943-44—*continued.*

Income.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.
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**INCOME FROM PERSONAL EXERTION.—TAXPAYER WITH DEPENDENT WIFE AND ONE CHILD.**

£	£	£	£	£	£	£
100	..	..	..	..	..	..
150	..	..	..	..	..	..
200	..	0.4	..	0.6	0.9	2.7
250	..	3.2	7.4	6.1	3.8	7.3
300	..	5.4	9.7	8.5	13.1	22.9
350	..	8.2	12.1	15.7	22.0	37.5
400	..	12.1	16.7	25.3	32.3	53.7
500	..	21.6	27.4	45.4	55.2	88.9
600	..	32.3	37.4	66.2	80.7	126.6
800	..	56.8	67.2	117.3	140.2	207.3
1,000	..	84.1	98.0	180.5	211.2	293.2
1,500	..	165.0	184.0	390.0	437.0	547.0
2,000	..	259.0	289.0	662.0	706.0	870.0
3,000	..	489.0	592.0	1,255.0	1,514.0	1,658.0
5,000	..	1,127.0	1,395.0	2,496.0	3,284.0	3,440.0

**INCOME FROM PERSONAL EXERTION.—TAXPAYER WITH DEPENDENT WIFE AND TWO CHILDREN.**

£	£	£	£	£	£	£
100	..	..	..	..	..	..
150	..	..	..	..	..	..
200	..	..	..	..	..	..
250	..	1.9	6.1	4.8	1.5	2.9
300	..	4.1	8.4	7.2	10.0	17.4
350	..	6.9	10.8	9.3	16.4	31.1
400	..	8.7	13.0	16.2	26.4	46.5
500	..	17.4	22.9	36.0	49.0	80.9
600	..	27.4	34.3	56.2	71.8	118.6
800	..	50.8	60.8	104.0	125.5	199.3
1,000	..	78.0	91.5	164.1	191.6	285.2
1,500	..	157.0	176.0	366.0	411.0	539.0
2,000	..	250.0	280.0	634.0	702.0	862.0
3,000	..	478.0	576.0	1,226.0	1,471.0	1,650.0
5,000	..	1,107.0	1,371.0	2,464.0	3,279.0	3,432.0

**INCOME FROM PROPERTY.—TAXPAYER WITH NO DEPENDANTS.**

£	£	£	£	£	£	£
100	..	..	..	..	..	..
150	..	..	3.1	..	..	10.5
200	..	3.3	5.8	6.0	6.8	21.9
250	..	5.8	8.9	16.0	18.4	40.1
300	..	10.7	14.5	28.2	31.0	63.3
350	..	17.1	20.6	40.2	43.6	89.2
400	..	23.1	27.1	52.2	56.0	115.4
500	..	36.4	41.9	87.7	85.9	167.9
600	..	51.9	59.1	106.9	116.6	221.5
800	..	92.0	103.6	176.7	187.2	331.0
1,000	..	132.8	148.7	261.1	273.0	444.0
1,500	..	263.0	289.0	530.0	549.0	766.0
2,000	..	418.0	460.0	823.0	907.0	1,159.0
3,000	..	795.0	924.0	1,448.0	1,769.0	2,026.0
5,000	..	1,807.0	2,134.0	2,764.0	3,558.0	3,830.0



10. Rates of Commonwealth Income Tax on Individuals.—From 1931-32 to 1939-40 the rates of Commonwealth Income Tax on Individuals were expressed as a percentage of the formula adopted in 1931-32. The following formulae show the tax in pence where T is the taxable income in pounds :—

	Taxable Income.		Tax in Pence.
Personal Exertion ..	£1-£6,900 ..	..	.00625T <sup>2</sup> + 3T
	over £6,900 ..	..	90T - 302,737.5
Property ..	£1-£500 ..	..	.01T <sup>2</sup> + 3T
	£501-£1,500 ..	..	.014T <sup>2</sup> + T
	£1,501-£3,700 ..	..	.0115T <sup>2</sup> + 4.75T
	over £3,700 ..	..	90T - 157,990

The following percentages of the tax calculated under this formula were payable from 1931-32 to 1939-40 :—

Year.	Personal Exertion.	Property.
	%	%
1931-32 and 1932-33 ..	100	100(a)
1933-34 and 1934-35 ..	85	100(b)
1935-36 ..	85	100(c)
1936-37 and 1937-38 ..	76.5	90
1938-39 ..	87.975	103.5
1939-40 ..	96.7725	113.85

(a) In addition a further tax of 10 per cent. of the Taxable Income from Property was payable.

(b) In addition a further tax of 6 per cent. of the Taxable Income from Property was payable.

(c) In addition a further tax of 5 per cent. of the Taxable Income from Property was payable.

The Rates of Commonwealth Income Tax in subsequent years were as follows :—  
(T = Taxable Income.)

Year.	Personal Exertion.		Property.	
	Taxable Income.	Tax in Pence.	Taxable Income.	Tax in Pence.
1940-41..	£1- £400	.16T	£1- £400	.20T
	£401-£1,500	.04T <sup>2</sup>	£401-£1,200	.05T <sup>2</sup>
	over £1,500	120T - 90,000	over £1,200	120T - 72,000
1941-42(a)	£1- £400	.16T	£1- £400	.20T
	£401-£2,500	.04T <sup>2</sup>	£401-£2,000	.05T <sup>2</sup>
	over £2,500	200T - 250,000	over £2,000	200T - 200,000
1942-43..	£151- £200	.12T <sup>2</sup> - 28T + 2,700	£151- £200	.15T <sup>2</sup> - 35T + 3,375
	£201- £250	.08T <sup>2</sup> + 18T - 4,900	£201- £250	.10T <sup>2</sup> + 22.5T - 6,125
	£251- £600	.02T <sup>2</sup> + 48T - 8,650	£251- £600	.025T <sup>2</sup> + 60T - 10,812.5
	£601-£2,500	.033T <sup>2</sup> + 32.4T - 3,970	£601-£2,100	.04125T <sup>2</sup> + 40.5T - 4,962.5
	£2,501-£4,000	.006T <sup>2</sup> + 168T - 174,220	over £2,100	216T - 191,600
	over £4,000	216T - 270,220		
1943-44..	£101- £300	.165T <sup>2</sup> - 3T - 750	£101- £200	.165T <sup>2</sup> - 3T - 750
	£301-£1,000	.01T <sup>2</sup> + 90T - 14,700	£201- £300	.24T <sup>2</sup> - 20.5T - 250
1944-45(b)	£1,001-£2,000	.033T <sup>2</sup> + 44T + 8,300	£301-£1,000	.01T <sup>2</sup> + 117.5T - 2,950
	£2,001-£3,000	.015T <sup>2</sup> + 116T - 63,700	£1,001-£2,000	.034T <sup>2</sup> + 69.5T + 3,050
	£3,001-£5,000	.004T <sup>2</sup> + 182T - 162,700	£2,001-£5,000	.00275T <sup>2</sup> + 194.5T - 121,950
	over £5,000	222T - 262,700	over £5,000	222T - 190,700

(a) In addition a War Tax was imposed at rates commencing at 3d. in the £ on incomes in excess of £156, rising by .125d. for every additional £6 of income in excess of £156 until the rate reached 6d. in the £ on incomes in excess of £300.

(b) Rates of tax for 1944-45 are the same as for 1943-44 but are subject to the pay-as-you-earn 75 per cent. rebate.

From 1931-32 to 1941-42 a statutory exemption was allowed as a deduction from net income (assessable income less all other deductions) in order to arrive at taxable income. The statutory exemption from 1931-32 to 1939-40 was £250 less £1 for each £2 by which the net income exceeded £250. The exemption vanished at a net income of £750. From 1931-32 to 1933-34, however, the statutory exemption allowed on

income from property was £200 less £1 for every £2 by which the net income exceeded £200 and vanished at £600. In 1940-41 and 1941-42 the statutory exemption was £200 less £1 for each £1 by which the net income exceeded £200, and vanished at £400. No statutory exemption was allowed for War Tax.

In 1942-43 it was provided that if the taxable income was less than £157 no tax should be payable and that if the taxable income was less than £167 tax payable should not exceed half the excess of the taxable income over £156.

In 1943-44 and 1944-45 no tax is payable if the taxable income is less than £105, and if the taxable income is less than £113 tax payable shall not exceed half the excess of the taxable income over £104.

In each year the minimum tax payable was 10s. and for 1942-43, 1943-44 and 1944-45 it is provided that tax payable and rebates shall be calculated to the nearest shilling.

**11. Company Income Taxes.**—(i) *General.* For taxation purposes, companies are divided into two main groups—public companies and private companies. A private company is defined as a company which is under the control of not more than seven persons, and which is not a company in which the public are substantially interested or a subsidiary of a public company. Ordinary income tax is imposed on both groups of companies, but other taxes on companies are imposed according as to whether a company is public or private. Pay-as-you-earn taxation has not been applied to companies.

(ii) *Public Companies.*—(a) *Ordinary Income Tax.* Companies are assessed for Commonwealth Income Tax on the same principles as individuals. Tax is, however, assessed at a flat rate on the whole taxable income. Dividends received are assessable income both for companies and individuals, but companies receive a rebate at the company rate on the amount of dividends included in the taxable income. This rebate is not allowed to non-resident companies. The rates of ordinary income tax since 1931-32 have been as follows:—1931-32 and 1932-33, 1s. 4.8d. in £1; 1933-34 to 1937-38, 1s. in £1; 1938-39, 1s. 1.8d. in £1; 1939-40 and 1940-41, 2s. in £1; 1941-42, 4s. in £1; and 1942-43 to 1944-45, 6s. in £1. A further tax on taxable income from property was payable as follows:—1931-32 and 1932-33, 10 per cent.; 1933-34 and 1934-35, 6 per cent.; and 1935-36, 5 per cent. The rate on Commonwealth Loan Interest subject to 1930-31 rates is 1s. 4d. in £1 or the actual company rate, whichever is the lesser.

(b) *War-time (Company) Tax.* The War-time (Company) Tax was first imposed in 1940-41 on income derived in 1939-40. The tax is levied on the taxable profit of a company in relation to capital employed. Taxable profit is obtained by deducting from taxable income:—

(a) Commonwealth ordinary income tax payable in respect of that taxable income; and

(b) any dividend included in taxable income.

Capital employed excludes shareholdings in other companies.

The tax is imposed on the excess of the taxable profit over a percentage of capital employed. This percentage standard was 8 per cent. for 1940-41 and 5 per cent. since that year. The rates of tax varied from 4 per cent. of the excess to 60 per cent. of the excess (where the excess was over 14 per cent. of capital employed) in 1940-41, and from 6 per cent. of the excess to 78 per cent. of the excess (where the excess was over 12 per cent. of capital employed) in subsequent years.

Unlike the War-time Profits Tax of the last war, the tax is not related to pre-war profits.

Private companies, co-operative companies, mutual life assurance companies, companies in which little or no capital is required and profits are derived from commissions, etc., and companies other than subsidiaries whose taxable profits do not exceed £1,000 are exempt from the tax.

(c) *Super Tax.* In conjunction with the War-time (Company) Tax, a Super Tax of 1s. in the £ on the excess of the taxable income over £5,000 was imposed. All companies receive a rebate of 1s. in the £ on the amount of dividends (from companies which have already paid super tax) included in super tax income.

Commonwealth Loan Interest subject only to 1930-31 rates of tax is excluded from super tax income since the full 1930-31 rate of 1s. 4d. in the £ is already paid as ordinary income tax. The interest is, however, included in taxable profit for the purposes of War-time (Company) Tax where it has the effect of reducing the War-time (Company) Tax payable.

If a company is liable to both Super Tax and War-time (Company) Tax, the taxes are alternative and, in effect, only the higher of the two and not both taxes are payable. This is achieved by allowing a rebate against War-time (Company) Tax of the lesser of the following amounts :—

- (a) the amount of War-time (Company) Tax assessed, or
- (b) the net amount of Super Tax payable.

(d) *Undistributed Income Tax.* Since 1940-41 a tax has been imposed at the rate of 2s. in the £ on the undistributed income of a public company. The undistributed income is the taxable income less :—

- (a) Commonwealth Income Tax, Super Tax and War-time (Company) Tax and any tax paid outside Australia on the taxable income;
- (b) Dividends paid out of the taxable income before the expiration of six months (nine months if the company is a non-resident) after the close of the year of income;
- (c) The net loss incurred in carrying on the company's business outside Australia; and
- (d) The portion of Commonwealth Loan Interest subject to 1930-31 rates remaining in undistributed income.

Mutual life assurance companies and non-resident companies not carrying on business in Australia are exempt from the tax.

(iii) *Private Companies.* Private companies are not liable for War-time (Company) Tax, super tax or the normal undistributed income tax. An additional tax on the undistributed income is imposed, this tax being based on the close relationship between a private company and a partnership.

The undistributed income is calculated in approximately the same way as for a public company, but instead of a flat rate of 2s. in the £ being imposed, the additional tax which would have been payable by the shareholders, if all the income had been distributed, is calculated, and this amount is charged to the company as additional tax on undistributed income. The tax so charged is allowed with other taxes as a deduction in determining the undistributed income for the following year. In this way the shareholders of a private company are required to pay approximately the same tax as if they were a partnership or sole traders.

12. *Yield of Income Taxes.*—(i) *Collections from all Income Taxes.* The following table shows the collections of taxes of all types imposed on income for the past six years :—

## INCOME TAX COLLECTIONS.

Year.	Individuals.			Companies.			Total.		
	Commonwealth.	State.	Total.	Commonwealth.	State.	Total.	Commonwealth.	State.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1938-39 ..	7,582	18,314	25,896	4,300	11,498	15,798	11,882	29,812	41,694
1939-40 ..	8,450	20,618	29,068	7,980	12,833	20,813	16,430	33,451	49,881
1940-41 ..	26,505	21,149	47,654	16,800	14,310	31,110	43,395	35,459	78,854
1941-42 ..	46,883	20,352	67,235	30,681	16,370	47,051	77,504	36,722	114,226
1942-43(a) ..	93,481	4,792	98,273	48,408	1,520	49,928	141,889	6,312	148,201
1943-44(a) ..	132,559	887	133,446	51,410	384	51,794	183,969	1,271	185,240

(a) Commonwealth collections are greater than the Budget figures by the amount of refunds of State taxes—State collections are net arrears.



(ii) *Commonwealth Income Tax Assessed.* The amounts of Commonwealth taxes assessed on the income of recent years are shown in the following table. The amounts are shown under the year in which most of the assessments were made, i.e., the year following the income year :—

## COMMONWEALTH INCOME TAXES ASSESSED.

Tax.	1938-39.	1939-40.	1940-41.	1941-42.	1942-43.
	£'000.	£'000.	£'000.	£'000.	£'000.
<b>Individuals—</b>					
Income Tax .. ..	7,259	7,423	29,787	38,974	83,227
War Tax .. ..	..	..	..	8,378	..
<b>Companies—</b>					
Income Tax .. ..	4,239	8,041	9,342	19,916	35,764
Super Tax .. ..	..	..	2,856	2,713	3,208
War-time (Company) Tax ..	..	..	2,212	4,090	3,286
<b>Undistributed Income Taxes(a)—</b>					
Private Companies .. ..	698	688	3,766	6,296	9,100
Non-Private Companies ..	..	..	2,578	2,397	1,758
<b>Total .. ..</b>	<b>12,196</b>	<b>16,152</b>	<b>50,541</b>	<b>82,764</b>	<b>136,343</b>

(a) Approximate.

(iii) *Commonwealth Income Tax on Residents in Grades of Incomes.* Individual income taxes assessed on residents were distributed according to grades of actual income (income before allowing deductions of a concessional nature or statutory exemptions and including exempt income) as follows :—

## COMMONWEALTH INCOME TAXES ON RESIDENT INDIVIDUALS IN GRADES OF INCOMES.

Grade of Actual Income.		1939-40.		1940-41.		1941-42.				1942-43.	
		No. of Tax-payers.	Tax.	No. of Tax-payers.	Tax.	No. of Tax-payers.	Income Tax.	War Tax.	Total Tax.	No. of Tax-payers.	Tax.
£	£		£'000.		£'000.		£'000.	£'000.	£'000.		£'000.
151- 200	..	..	..	..	..	187,000	..	394	394	193,605	961
201- 250	..	..	88,328	242	265,497	272	810	1,082	1,082	193,259	1,762
251- 300	47,732	27	127,231	720	316,872	825	1,348	2,173	270,287	3,890	5,733
301- 350	55,375	53	102,204	881	211,813	1,167	1,224	2,391	266,049	5,733	8,032
351- 400	48,835	73	72,821	876	119,371	1,259	817	2,076	182,714	5,515	8,032
401- 500	68,168	182	86,751	1,570	118,262	2,190	988	3,178	182,915	8,032	1,821
501- 600	38,939	197	44,272	1,300	51,500	1,613	543	2,156	71,949	4,821	5,681
601- 751	29,912	294	33,434	1,559	36,003	1,778	473	2,251	(a) 54,531	1,681	4,022
751- 1,000	23,070	460	25,915	2,096	27,418	2,340	464	2,804	(b) 23,675	4,022	4,015
1,001- 1,250	10,922	372	12,376	1,745	13,173	1,986	283	2,269	15,597	4,015	3,329
1,251- 1,500	6,281	306	7,467	1,610	7,720	1,798	198	1,996	9,026	3,329	5,436
1,501- 2,000	7,987	691	7,938	2,748	8,024	3,008	244	3,252	9,756	7,702	4,815
2,001- 3,000	4,549	686	6,294	3,862	6,509	4,820	243	5,063	7,619	7,702	3,182
3,001- 4,000	2,045	615	2,399	2,464	2,316	3,212	103	3,315	2,718	3,182	7,317
4,001- 5,000	984	484	1,123	1,562	1,158	2,410	59	2,469	1,223	2,402	2,343
5,001-10,000	1,298	1,321	1,480	3,297	1,507	5,203	98	5,301	1,667	2,343	2,402
10,001-15,000	205	504	244	1,023	264	1,800	26	1,826	276	2,402	2,343
15,001-25,000	92	393	112	714	112	1,237	17	1,254	(c) 152	2,343	767
25,001-50,000	39	316	47	600	46	900	10	910	(d) 28	767	321
50,001 and over	8	141	12	297	12	396	5	401	7	321	
<b>Total ..</b>	<b>346,441</b>	<b>7,115</b>	<b>620,448</b>	<b>29,166</b>	<b>1,374,577</b>	<b>38,214</b>	<b>8,347</b>	<b>46,561</b>	<b>1,493,053</b>	<b>82,045</b>	

(a) Grade £601-£800.  
£30,001-£50,000.

(b) Grade £801-£1,000.

(c) Grade £15,001-£30,000.

(d) Grade

## § 22. The Secondary Industries Commission.

The Secondary Industries Commission was established by the Government towards the end of 1943 as part of the Ministry of Post-war Reconstruction. It is charged with the task of investigating possible uses to which the munitions plants of the Commonwealth may be put in peace time, so that they may be fitted into the structure of Australian peace-time economic life. The Government is also looking to the Commission to prepare plans of action to ensure that secondary industries in this country will effect the transition from war to peace in the most satisfactory way. These tasks raise both technical and general economic problems.

The members of the Commission are :—

Mr. J. K. Jensen, O.B.E., Chairman (also Secretary to the Ministry of Munitions),  
Mr. S. F. Cochran, Mr. F. T. Merrett, Mr. H. F. Morris (also Chairman of the Tariff Board), and Mr. W. D. Scott.

The specific duties of the Commission are :—

- (a) To review and investigate the war-time development of the Commonwealth with particular regard to Government factories, particularly munitions establishments and annexes.
- (b) To recommend to the Government measures which should be taken to implement a policy of industrial development in Australia.

The Commission is seeking the advice of all Government authorities which have experience of secondary industry matters. It is receiving guidance and advice from the Tariff Board and an active liaison is maintained with the Departments of Munitions and War Organization of Industry. Where appropriate, it is proposed to establish Trade Advisory Panels representative of all sections of a particular industry to advise the Commission. This has already been done in the cases of the textile, optical and mining industries.

The Commission has appointed its own technical staff to assist it in detailed examinations to be made of secondary industries. A section of the Economic Research staff of the Department of Post-war Reconstruction is attached to the Commission. This section is engaged in examining the economic aspects of Australia's post-war production and marketing problems, the associated problems of employment in secondary industries, especially in the transition period from war to peace, the future of Australia's overseas trade in manufactured goods and the problems involved in financing industrial development.

## CHAPTER XXVIII.

## STATISTICAL ORGANIZATION AND SOURCES OF INFORMATION.

## § 1. General.

**Development of Australian Statistics.**—(i) *General.* An outline of the history and development of statistics in Australia is published in Official Year Book No. 19 (see p. 988) and previous issues, particular reference being made to the Crown Colony Blue Books, Statistical Registers, Prominent State Statisticians, Statistical Conferences, the Foundation of the Federal Bureau, and Uniformity of Statistical Control. It is not proposed to repeat this information in this issue.

(ii) *Present Organization.*—The organization in respect of the collection, tabulation, etc., of statistical data as between the State and Commonwealth Statistical Bureaux, and State and Commonwealth Government Departments, is described in Official Year Book No. 19, p. 990. Limits of space preclude its repetition in this issue.

## § 2. Statistical Publications of Australia.

1. *General.*—The official statistical publications of Australia may be divided bibliographically into two main divisions, namely :—(1) Commonwealth publications dealing both individually and collectively with the several States of Australia; and (2) State publications dealing with individual States only. Besides these there are many other circulars, press notices, etc., issued regularly which, though not wholly statistical, necessarily contain a considerable amount of statistical information.

2. *Commonwealth Publications.*—Commonwealth publications may be grouped under two heads, namely :—(i) Publications issued by the Commonwealth Statistician; and (ii) Parliamentary and Departmental Reports and Papers.

(i) *Publications issued by the Commonwealth Statistician.* The following is a list of the principal statistical publications issued from the Commonwealth Bureau of Census and Statistics since its inauguration to December, 1944 :—

*Australian Life Tables, 1901–1910. Australian Joint Life Tables, 1901–1910. Australian Life Tables, 1920–1922.*

*Australian Life Tables, 1932–1934. Australian Joint Life Tables, 1932–1934.*

*Australian Primary Industries.*—Report prepared for the Empire Producers Conference, Sydney, March, 1938.

*Census (1911) Results.*—*Bulletins.* Vols. I., II., and III., with Appendix “Mathematical Theory of Population.”

*Census (1921) Results.*—*Bulletins.* Nos. 1 to 26. Parts I. to XVI., forming Vol. I., and Parts XVII. to XXIX., forming, with the Statistician’s Report, Vol. II.

NOTE.—PART XXVII., *Life Tables.*

*Census (1933) Results.*—*Bulletins.* Nos. 1 to 25. Parts I. to XIV., forming Vol. I., Parts XV. to XXVIII. forming Vol. II., and Parts XXIX. to XXXVII. forming with Statistician’s Report, and Australian Life Tables 1932–34, Vol. III.

*Dairying Summary, Monthly.*—First issue, September, 1937.



- Finance*—Bulletins, 1907 to 1916-17 annually; 1917-18 and 1918-19 (one vol.); 1919-20 and 1920-21 (one vol.); 1922-23 to 1942-43 annually.
- Labour and Industrial Statistics*.—Memoranda and Reports, various, to 1913.
- Labour Report*, annually, 1913 to 1942.
- Local Government in Australia*.—July, 1919.
- Monthly Review of Business Statistics*.—First issue, October, 1937.
- Official Year Book of the Commonwealth of Australia*—Annually, 1907 to present issue (1942 and 1943).
- Oversea Trade*, annually, 1906 to 1941-42.
- Pocket Compendium of Australian Statistics* (formerly Statistical Digest), 1913, 1914, 1916, and 1918 to 1944 annually.
- Population and Vital Statistics*.—Bulletins and Reports, various, 1906-1910. *Demography*, 1911 to 1942 annually.
- Production*.—Bulletin, annually, 1906 to 1942-43. From 1936-37 issued in two parts: Part I. Secondary Industries; Part II. Primary Industries and Total Recorded Production.
- Professional Papers*.—Various. A full list appears in Official Year Book No. 13, p. 3.
- Quarterly Summary of Australian Statistics*.—First issue, No. 70, December, 1917, replacing *Monthly Summary of Australian Statistics* (Bulletins Nos. 1 to 69).
- Social Insurance*—Report to the Hon. the Minister of Trade and Customs, 1910.
- Social Statistics*—Bulletins, 1907 to 1915 annually, and 1918.
- Superannuation for the Commonwealth Public Service*—Report to the Hon. the Minister for Home Affairs, 1910.
- Transport and Communication*—Bulletins, 1906, 1908 to 1916 annually; 1919 to 1930 annually, and 1932 to 1943 annually.
- Wages and Prices*.—January, 1932.
- Wealth*—The Private Wealth of Australia and its Growth as ascertained by various methods, together with a Report on the War Census in 1915.
- Wheat Summary, Monthly*—First issue, July, 1936.

(ii) *Commonwealth Parliamentary and Departmental Reports and Papers*. Lists of the principal official reports and other documents containing statistical information issued from the inauguration of the Commonwealth appear in the Official Year Books up to No. 15, but limits of space preclude the incorporation of this information in the present volume.

3. *State Publications*.—The chief statistical publications of each State are set out hereunder. Limits of space preclude a further enumeration of the various Departmental Reports, statements of accounts, etc., issued by officials, boards, local government bodies, etc., in each State.

- (a) New South Wales—Statistical Register (annual); Official Year Book of New South Wales (annual); Statesman's (Pocket) Year Book (annual); Statistical Bulletin (monthly to December, 1919, thereafter quarterly); Monthly Summary of Business Statistics.
- (b) Victoria—Statistical Register (annual to 1916, then discontinued); Victorian Year Book (annual); Statistical Abstracts (quarterly to 1917).
- (c) Queensland—Statistical Register (annual); Official Year Book, 1901; A.B.C. of Queensland Statistics (annual to 1936, then discontinued); the Queensland Year Book (annual, first issue 1937, suspended since 1941).
- (d) South Australia—Statistical Register (annual); Official Year Book, 1912 and 1913; Statesman's Pocket Year Book (annual); Quarterly Summary of Statistics.
- (e) Western Australia—Statistical Register (annual); Statistical Abstracts (quarterly, previously issued monthly to July, 1917); Pocket Year Book of Western Australia (annual).
- (f) Tasmania—Statistical Register (annual); Pocket Year Book (annual).

### § 3. Select List of Representative Works Dealing with Australia.

(Compiled by the Librarian of the Commonwealth National Library.)

Under each heading a list is first given of the principal standard books which are still in print. This is followed by lists of selected books published during the current year and of official publications, excluding annual reports, of the same period. In the present list the period covered is 1st January, 1942, to 30th September, 1943. A few books which, though published earlier, were received after the compilation of the last issue are also included.

Technical works on Law, Medicine and the pure sciences are excluded.

Where known the retail price in the country of publication is given, but this is subject to fluctuation owing to war conditions.

A copy of each of the works mentioned is preserved in the Library and access thereto may be had by any Commonwealth official or other authorized person.

The Library also publishes an annual catalogue of Australian publications, official papers and books on Australia published overseas. Copies of this are obtainable from the Government Printer at a price of 2s.

#### General and Descriptive.

- AUSTRALIAN ENCYCLOPAEDIA, THE: editors, A. W. Jose, H. J. Carter and T. G. Tucker. 2 vols. (Angus & Robertson, 55s.) 3rd edition, Sydney, 1926-27 (o.p., but new edition to be prepared after the war).
- AUSTRALIAN NATIONAL PUBLICITY ASSOCIATION. Australia: official handbook. (The Association, 2s. 6d.) Melbourne, 1941.
- ELDERSHAW, M. Barnard (*i.e.*, M. F. Barnard and F. S. P. Eldershaw). My Australia. (Jarrolds, 6s.) London, 1939.
- MADIGAN, C. T. Central Australia. (Oxford University Press, 12s. 6d.) Melbourne, 1943.
- OFFICIAL YEAR BOOK OF THE COMMONWEALTH OF AUSTRALIA, Nos. 1 to date. (Government Printer, 5s. *per issue*.) Canberra, 1908 to date.
- TAYLOR, T. G. Australia: a study of warm environments and their effect on British settlement. (Methuen, 21s.) London, 1940.
- WALKABOUT: Australia and the South Seas. (Australian National Publicity Association, 12s. *per annum*.) Melbourne, 1934 to date.
- WOOD, T. Cobbers: A Personal Record of a Journey from Essex, in England, to Australia. (Oxford, University Press, 6s. 6d.) Melbourne, 1943.

#### RECENT PUBLICATIONS.

- BARRETT, C. L. Around Australia. (Cassell, 15s.) Melbourne, 1942.
- GRATTON, C. H. Introducing Australia. (John Day, \$3.) New York, 1942.
- HILL, E. Australia: land of contrasts: 27 plates in colour by notable Australian artists: ed. by S. Ure Smith. (John Sands, 5s.) Sydney, 1943.
- MARSHALL, A. J. Australia limited. (Angus & Robertson, 2s. 6d.) Sydney, 1942.
- MITCHELL, E. Australia's alps. (Angus & Robertson, 12s. 6d.) Sydney, 1942.

#### Territories Outside Australia.

- AUSTRALIA: *Committee* . . . [on] the possibility of establishing a combined administration of the territories of Papua and New Guinea, etc. Report. (Government Printer, 3s.) Canberra, 1939.
- AUSTRALIA:—*External Affairs, Department of*. Handbook and index to accompany a map of Antarctica produced by the Department of the Interior, 1939: by E. P. Bayliss and J. S. Cumpston. (Department of External Affairs, 5s.) Canberra, 1940.
- EGGLESTON, F. W., *editor*. The Australian Mandate for New Guinea. (Melbourne University Press, 5s.) Melbourne, 1928.
- OFFICIAL HANDBOOK OF NEW GUINEA. (External Territories Department, 2s.) Canberra, 1937.
- OFFICIAL HANDBOOK OF PAPUA: 5th ed. (Government Printer, 2s.) Port Moresby, 1938.
- See also the annual reports of the Administrators of the various Territories.

#### RECENT PUBLICATIONS.

- CLUNE, F. P. Prowling through Papua. (Angus & Robertson, 12s. 6d.) Sydney, 1942.
- LETT, L. The Papuan achievement. (Melbourne University Press, 10s. 6d.) Melbourne, 1942.
- RHYS, L. High lights and flights in New Guinea: being in the main an account of the discovery and development of the Morobe gold-fields. (Hodder & Stoughton, 18s.) London, 1942.
- WHITING, J. W. M. Becoming a Kwoma: teaching and learning in a New Guinea tribe. (Yale University Press, \$2.75.) New Haven, 1941.

## History.

- CAMBRIDGE HISTORY OF THE BRITISH EMPIRE, vol. 7, pt. 1: Australia. (Cambridge University Press, 31s. 6d.) Cambridge, 1933.
- FERGUSON, J. A. Bibliography of Australia: vol. 1, 1784-1830. (Angus & Robertson, 63s.) Sydney, 1941.
- FITZPATRICK, B. C. British imperialism and Australia, 1783-1833: an economic history of Australasia. (Allen & Unwin, 18s.) London, 1939.
- The British Empire in Australia: an economic history, 1834-1939. (Melbourne University Press, 21s.) Melbourne, 1941.
- HARRIS, H. L. Australia in the making. (Angus & Robertson, 4s.) Sydney, 1936.
- HISTORICAL RECORDS OF AUSTRALIA: editor, J. F. Watson (in progress). (Commonwealth Parliament Library Committee, Canberra, 12s. 6d. *per vol.*) Sydney, 1914 to date. (34 vols. have so far appeared. Publication has been suspended since 1925.)
- HISTORICAL STUDIES: Australia and New Zealand. (Melbourne University Press, 10s. *per annum.*) Melbourne, 1940 to date.
- O'BRIEN, Rev. E. M. The foundation of Australia (1786-1800): a study in English criminal practice and penal colonization in the eighteenth century. (The Remainder Centre, 8s. 6d.) London, 1937.
- SHANN, E. O. G. An economic history of Australia. (Cambridge University Press, 18s.) Cambridge, 1930. 2nd impression, 1938.

## RECENT PUBLICATIONS.

- BARNARD, M. Australian outline. (Ure Smith Pty., 6s.) Sydney, 1943.
- Macquarie's world. (Australian Limited Editions Society, 42s.) Sydney, 1941.
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\* It should be noted that several important books on this subject are out of print, and have therefore not been included.



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 REVIEW OF EDUCATION IN AUSTRALIA [annual]: by K. S. Cunningham and others. (Melbourne University Press, 8s. 6d. *per annum*.) Melbourne, 1939 to date.  
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- CUSACK, E. D. Red sky at morning: a play in three acts. (Melbourne University Press, 2s. 6d.) Melbourne, 1942.
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- MITCHELL, Mary. One more flame. (Methuen, 8s. 6d.) London, 1942.
- SHAW, C. Outback occupations: [sketches]. (Dymock's Book Arcade, 3s.) Sydney, 1943.

## Art.†

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- SOCIETY OF ARTISTS BOOK 1942. (Ure Smith Pty.) Sydney, 1942.

\* The works of individual authors have not been included in the first section of this list. References to them will be found in Miller, Green and Serle.

† Books on the work of particular artists have been excluded from the list, though many of these, e.g., those published by Art in Australia, are indispensable for the study of Australian Art.

## DIARY OF PRINCIPAL ECONOMIC EVENTS.

The principal economic events for the years 1931 to 1938 were given on pp. 968 to 977 of the Official Year Book No. 33. The diary given in the following pages relate to happenings leading to the present war and subsequent events.

### 1939.

*2nd January.*—Owing to the refusal of waterside workers to load pig-iron for Japan 4,000 steel workers at Port Kembla were thrown out of employment.

*29th January.*—Arrival of technical members of British Air Mission to investigate possibilities of further development of aircraft manufacture in Australia. Subsequently one of the members stated that he was surprised at the potential capacity of Australian factories for the manufacture of aircraft.

*7th February.*—Internal loan of £8,525,710, 3½ per cent., issued at par, maturing in 1953–55, for public works and other purposes.

*17th March.*—Council for Scientific and Industrial Research directed to make comprehensive survey of the raw materials of industry; to ascertain what imports were vital to continuance of national effort; and to devise means of coping with the non-arrival of vital raw materials from overseas.

*24th March.*—Prime Minister announced that British and Commonwealth Governments had adopted the general recommendations of the British Air Mission regarding the manufacture of military aircraft in Australia; plant and equipment to start the industry estimated to cost £1,000,000.

*27th March.*—Test flight of Wirraway No. 1, the first modern service aircraft built in Australia.

*29th March.*—Revising its earlier decision, the Government decided to introduce immediately a compulsory register of man-power.

*4th May.*—The proposed new industry for the manufacture of tinplate in Australia would probably be established by Broken Hill Pty. Co. Ltd. at Whyalla (South Australia) at a cost of £2,500,000 and would give employment to 1,000 men.

*9th May.*—First cargo of steel—8,200 tons—sent from Australia to England left Newcastle.

*24th May.*—The Minister for Supply announced decision to proceed immediately with a compulsory register of productive capacity and resources of industries of defence significance.

*30th May.*—Internal loan of £4,751,470, 3½ per cent., issued at £99, maturing in 1953–55, for public works and other purposes.

*7th June.*—Commonwealth loan in London of £6,000,000, 4 per cent., issued at £98 10s., maturing in 1961–64, for defence purposes.

*8th June.*—Government accepted amendment to National Register Bill to provide for register of private wealth; all persons possessing assets of £500 or more to be required to furnish returns.

*10th June.*—Parramatta, the new 1,400-ton sloop for the Royal Australian Navy, launched at Cockatoo Dock.

*22nd June.*—Loan Council agreed to loans of £41,000,000 for Commonwealth and States.

*27th June.*—Internal loan by Commonwealth Bank of £3,000,000, 3½ per cent., issued at par, maturing 15th August, 1943, for public works and other purposes.

*1st July.*—Public debt at 30th June, 1939, was £1,295,022,972 or £186 os. 10d. per head of population.

*2nd July.*—It was reported that more than twenty ships had been chartered to carry to Britain cargoes of Australian steel totalling between 150,000 and 170,000 tons.

*7th July.*—Commonwealth Government surplus for 1938–39 was £627,309; the aggregate State deficit was £3,870,275.

*1st August.*—Savings Bank deposits reached record total of £245,548,615 at 30th June, 1939, equal to £35 ss. 7d. per head of population.

**15th August.**—Commonwealth Arbitration Court decided that in general the standard working week for Australian industry should be 44 hours.

**26th August.**—Commonwealth Government assumed wide powers to safeguard national interests.

**28th August.**—Commonwealth control of oversea exchange transactions and export of money.

**29th August.**—Commonwealth took over a number of Australian ships.

**3rd September.**—Australia declared war on Germany.

**4th September.**—Board set up for the control of shipping. Captain G. D. Williams appointed Controller of Shipping.

**5th September.**—Britain bought Australia's wool clip and surplus food products.

**7th to 8th September.**—Action taken for the control of prices to prevent profiteering. Professor D. B. Copland appointed Controller of Prices with the assistance of two assessors. Proclamation issued enumerating eighteen groups of commodities immediately subject to price control at rates obtaining on 31st August; list to be extended later as required.

Temporary budget presented providing for increases in income tax, sales tax, customs and excise duties, including spirits, beer and petrol, to raise £5,910,000. Expenditure for 1939-40 estimated at £101,916,000 and revenue £101,940,000.

**9th September.**—National Security and Trading with Enemy Acts passed.

**13th September.**—Status of official representative in Canada raised to that of High Commissioner. The Canadian Government announced intention of appointing a High Commissioner in Australia.

Australian wheat crop during war period acquired by Commonwealth Government and marketed through a compulsory Federal Wheat Pool.

**21st September.**—Australia offered the British Government six Australian Air Squadrons for service overseas.

**23rd September.**—Commonwealth control of exports.

**29th September.**—Regulations issued to create War-time Price-Fixing Organization, conferring virtually unlimited powers on Commissioner of Prices, who is enabled to compel sale of any goods in trade in Australia in the reasonable and ordinary course of trade.

**3rd October.**—Under the agreement with the British Government, Australian growers will receive 13.4375d. per lb. for current wool clip and also one-half of profit on resales by Britain.

**5th October.**—Commonwealth Emergency Planning and Organization Regulations gazetted, under which sixteen separate classes of industries engaged in manufacture of wide range of commodities are to furnish returns of their manufacturing operations.

Commonwealth Government assumed wide powers for marshalling of oversea credit of Australia for national purposes.

**21st October.**—Compulsory military training for home defence to be introduced from January, 1940.

**31st October.**—Plans for the Australian Air Expeditionary Force recast in view of unprecedented Empire Air Scheme.

**1st November.**—National Security Regulations issued empowering Commonwealth Government virtually to commandeer services of Australian factories.

**17th November.**—It was announced that between 8,000 and 10,000 men will probably be engaged in the manufacture of military aircraft in Australia during 1941.

**29th November.**—Prime Minister announced that Australian troops would embark for abroad early in New Year.

**30th November.**—Revised Commonwealth Budget for 1939-40 increased defence expenditure from £33,137,000 to £62,014,000. No increase in taxation.

**1st December.**—Internal loan of £12,000,000, arranged by the Commonwealth Bank in conjunction with the trading banks, interest  $3\frac{1}{2}$  per cent., issued at par; £4,000,000 repayable in each of the years 1942-44, for purposes of defence and public works.

Introduction of Import Licencing Regulation to control exports from non-sterling countries.

**6th December.**—Commonwealth Government decided to provide subsidy up to £1,500,000 to encourage the production of complete motor cars in Australia.



*8th December.*—Conversion loan in London of £4,604,800, 3½ per cent., issued at £99, maturing in 1942-44.

*15th December.*—Prime Minister stated that first objective of Australia's contribution to the Empire Air Scheme would be the training of 26,000 men, including 10,400 pilots, at an estimated cost of £A50,000,000.

*19th December.*—The Commonwealth Arbitration Court reduced by one month the "lag" of its automatic adjustments of wages—to operate from first pay-period in a February, May, August or November.

*22nd December.*—Company with nominal capital of £1,000,000 to be formed by Australian Consolidated Industries Ltd. to manufacture motor engines and chassis in Australia.

*30th December.*—Plans announced for a new £1,000,000 factory in Sydney for the manufacture of aeroplane engines.

## 1940.

*4th January.*—Production of crude oil at Glen Davis, New South Wales.

*8th January.*—Right Hon. R. G. Casey, Minister for Supply and Development, appointed His Majesty's Envoy Extraordinary and Minister Plenipotentiary to the United States of America.

*9th January.*—Mr. C. E. Gauss, American Consul-General at Shanghai, appointed Envoy Extraordinary and Minister Plenipotentiary of the United States of America to Australia.

*11th January.*—Britain agreed to purchase large quantity of Australian wheat.

*15th January.*—Special committee appointed to direct all shipping between Australia and Great Britain.

*24th January.*—Commonwealth Bank and private trading banks reduced rates on fixed deposits by 5s. per cent.

*31st January.*—Agreement with Australian Consolidated Industries Ltd. for manufacture of motor cars in Australia suspended by Commonwealth Government.

*7th February.*—Recruiting for reinforcements for Second Australian Imperial Force to begin on 1st March, at rate of about 2,400 per month.

*29th February.*—Appointment of Aircraft Production Commission to supervise local production and maintenance of aircraft required in Australia for Empire Air Scheme.

*1st March.*—Internal loan of £18,164,740, 3½ per cent. for five years, or 3½ per cent. for ten to sixteen years, issued at par, for defence and public works.

*6th March.*—Additional troops to be recruited in Australia for service abroad; Second Australian Imperial Force to consist of existing Sixth Division, a Seventh Division and Corps troops totalling in all 48,000 men; further 42,000 reinforcements to be recruited before June, 1941; Army Co-operation Squadron of Royal Australian Air Force also to go abroad.

*11th March.*—General coal strike began after failure of proposal that colliery owners or mining unions should apply to Commonwealth Court of Conciliation and Arbitration for compulsory conference.

*14th March.*—New Commonwealth Ministry sworn in; Country Party represented by three Ministers and two Assistant Ministers.

*18th March.*—Sale of war savings certificates began.

*29th March.*—New regulations governing private investment of money and interest rates.

*30th March.*—Further restrictions on imports from non-sterling countries; import of more than £2,000,000 worth of goods a year prohibited.

*11th April.*—Commonwealth Government ordered immediate compulsory census of coal stocks throughout Australia.

*1st May.*—Commonwealth Bank reduced interest rate on Treasury Bills from 1½ to 1¼ per cent.

*2nd May.*—Commonwealth Treasurer announced proposals to increase taxation revenue by £20,000,000 in next financial year.

3rd May.—Regulations issued empowering Commonwealth Government to re-open coal-mines and protect all free labour engaged.

9th May.—Commonwealth Government decided to re-open coal-mines; volunteer labour to be sought.

10th May.—Gas restrictions imposed in Sydney owing to coal strike.

13th May.—New South Wales Premier signed proclamation calling for volunteer labour for coal-mines. Age-limit for Australian Imperial Force volunteers increased from 35 to 40 years.

20th May.—Coal strike ended; dispute to be referred immediately to Commonwealth Court of Conciliation and Arbitration.

22nd May.—Plans for acceleration of war effort announced by Prime Minister; a third Australian Imperial Force division for service abroad to be raised; Brigadier-General H. W. Lloyd appointed Director-General of Recruiting; Mr. Essington Lewis appointed Director-General of Munition Supplies; naval graving dock for capital ships to be constructed at Sydney at cost of nearly £3,000,000.

28th May.—Commonwealth Bank and private trading banks reduced interest rates on fixed deposits by  $\frac{1}{4}$  per cent. Newsprint rationing plan announced. Loan Council appointed a Co-ordinator-General of Works to make recommendations to the Loan Council on the relative merits of civil loan works.

30th May.—Internal war loan of £20,582,490,  $2\frac{3}{4}$  per cent. for five years, or  $3\frac{1}{4}$  per cent. for ten to sixteen years.

31st May.—Commonwealth Parliament passed Bill concluding agreement between Government and Australian Consolidated Industries Ltd. for manufacture of motor cars in Australia, but clause granting monopoly to company deleted.

6th June.—Commonwealth Government to spend £2,032,000 on training aircraft and bomber 'planes; order for 500 trainers placed in Australia.

10th June.—Italy declared war on Allies.

11th June.—Announcement of petrol rationing scheme to effect reduction of one-third of petrol consumption.

21st June.—National Security Act amended giving Commonwealth Ministry widest powers ever held by an Australian Government.

23rd June.—Mass production of anti-tank guns planned by Commonwealth Government. Importance to the war effort of salvage of all waste metals and paper stressed by Minister for Supply.

25th June.—Arrival of New Zealand Minister for Supply to discuss industrial co-operation between Australia and New Zealand.

26th June.—Plans prepared by Ministry of Munitions for expenditure of £50,000,000 to expand munitions production.

28th June.—Further non-sterling import restrictions on goods valued at £2,650,000.

6th July.—Prime Minister stated 150,000 persons will be employed directly and indirectly in making munitions within twelve months.

8th July.—Commonwealth Treasurer announced surplus of £2,928,000 for year ended 30th June, 1940.

12th July.—San Francisco-Auckland air service inaugurated.

19th July.—Australian Imperial Force strength in Australia fixed at 80,000; recruiting temporarily interrupted. Imports from Netherlands East Indies to be given similar treatment to that given to countries within sterling area.

26th July.—Prime Minister announced establishment of Trade Unions Advisory Panel; invited A.C.T.U. to be represented; six other unions joined panel.

31st July.—Proclamation issued for the calling up of four new age-groups (20, 22, 23 and 24) of men in Australia for military training under plan to maintain home defence force of 250,000.

1st August.—Introduction of compulsory system of tax collection by instalments announced by Commonwealth Treasurer.

2nd August.—War Cabinet plans to expand production of power alcohol; committee to be appointed to explore possibilities of producing fuel from molasses and wheat.

9th August.—Australian motor-car importers agreed to cease importing motor chassis for nine months.

- 13th August.—Air crash at Canberra ; three Commonwealth Ministers killed.
- 14th August.—Loan Council approved of gross loan works expenditure in 1940-41 of £19,729,000, compared with £23,267,000 in 1939-40.
- 16th August.—Amended petrol rationing proposals announced.
- 18th August.—Sir John Latham appointed first Envoy Extraordinary and Minister Plenipotentiary to Japan.
- 20th August.—Commonwealth Treasurer estimated cost of war to be £177,000,000 for 1940-41. Unemployed number lowest on record.
- 26th August.—First Australian petrol produced on commercial scale distilled.
- 29th August.—Record Australian butter production in 1939-40.
- 1st September.—Record Australian wool production in 1939-40.
- 3rd September.—Extension of Empire Air Training Scheme announced by Minister for Air ; another 1,200 aeroplanes to be acquired.
- 18th September.—Australian price of gold reached record peak at £10 14s. a fine ounce.
- 21st September.—Commonwealth elections held.
- 1st October.—Petrol rationing began.
- 9th October.—Amendment to Commonwealth Investment Control Regulations.
- 10th October.—Arrangements made for storage in United States of America of 250,000,000 lb. of Australian wool as strategic reserve to be held by British Government.
- 11th October.—Commonwealth Government loan of £1,000,000 to States for drought relief.
- 22nd October.—Australian political leaders agreed on establishment of National Advisory War Council.
- 6th November.—Departure of Sir John Latham, Envoy Extraordinary and Minister Plenipotentiary for Japan.
- 8th November.—Sinking of British oversea vessel in Bass Strait, attributed to enemy mine ; Bass Strait temporarily closed to shipping.
- Wheat stabilization scheme announced ; guaranteed price of 3s. 6d. per bushel f.o.r., ports, bagged wheat, and licensing of growers to ensure rigid control over production. Commonwealth Government approved loan of £2,770,000 for drought relief.
- Action taken by Commonwealth Government to control by licence release of dutiable goods in order to prevent abnormal clearances in anticipation of higher duties.
- 12th November.—Australian war expenditure rose to £153,000,000 a year ; £98,000,000 more than previous year.
- 18th November.—Revised wheat stabilization plan providing for payment of 3s. 10d. per bushel f.o.r., ports, bagged wheat.
- 21st November.—Commonwealth Treasurer introduced record war-time Budget, providing for increases in direct and indirect taxation. For 1940-41 revenue estimated at £150,100,000, expenditure, omitting War Services, at £84,853,000, and War Services expenditure charged to the Budget at £65,220,000, making total expenditure of £150,073,000. In addition loan expenditure estimated at £119,731,000, comprising £117,231,000 for defence and war purposes.
- 28th November.—Internal war and works loan of £28,499,420, 2½ per cent. for five years and 3½ per cent. for ten to sixteen years.
- 5th December.—Commonwealth Government effected compromise with Labour Party on Budget proposals.
- Building control regulations—approval of Commonwealth Treasurer necessary for erection of new buildings and alterations costing over £5,000.
- 8th December.—Payment of third advance of 3d. per bushel on wheat of 1939-40 crop.
- 11th December.—Revised scheme for applying War-time Company Tax accepted by Commonwealth Government.
- 13th December.—Ten more age-groups liable for military service in Australia ; all single men and widowers without children, aged 19 years and in the 25 to 33 age-groups (inclusive) affected.
- 16th December.—Prime Minister announced establishment of Central Reference Board for conciliation in coal industry.



31st December.—Broken Hill Pty. Co. Ltd. applied to Commonwealth Treasurer for permission to raise £2,500,000 by issue of 2,500,000 shares at par; extra capital to be used for shipbuilding.

## 1941.

8th January.—Decision to form Australian Armoured Corps of 10,000 men.

10th January.—Another Army Co-operation Air Squadron to be offered Great Britain for service in Middle East.

22nd January.—Royal Commission in New South Wales recommended compulsory retirement of coal and shale miners at 60 years on pension to be provided—one-half by mine owners, one-quarter by mine workers and one-quarter by the State.

30th January.—Commonwealth Shipping Control Board appointed.

1st February.—At Premier's Conference, Acting Prime Minister submitted proposals for uniform income taxation.

7th February.—Applications for increase in Basic Wage refused by Commonwealth Arbitration Court. Quota for motor-car imports reduced.

8th February.—United States Congress passed "Lend-Lease" Bill.

13th February.—Further restriction of petrol from 1st April. Appointment of Commonwealth Coal Board.

14th February.—Fall in prices on Australian Stock Exchange.

20th February.—Announcement that militia troops would spend alternative periods of 90 days in and 90 days out of camp to ensure that 125,000 troops would be under arms for home defence. Commonwealth Government to provide £6,000,000 for Merchant Shipbuilding.

22nd February.—Newsprint production began at Boyer, Tasmania.

28th February.—Government war risk insurance of ships on Australian register begun.

14th March.—Japanese Envoy, Mr. Tashouo Kawai, presented credentials to the Governor-General, Canberra.

19th March.—Further revision of petrol ration.

20th March.—Commonwealth Government to plan three months emergency storage of household goods costing approximately £6,000,000.

21st March.—War Service Moratorium Regulations revised.

25th March.—Commonwealth Government fixed rents at rates ruling on 31st December, 1940, in States (Victoria, Queensland and Tasmania) where Fair Rents Boards were operating.

4th April.—Government plan announced for the stabilization of mutton and lamb industry by acquisition and encouragement of home consumption. British Government agreed to purchase exportable surplus of season's canned fruits.

22nd April.—United Kingdom Government contract meat purchases from Australia for year ended 30th September, 1941, restored to 198,000 tons after reduction to 144,000 tons in January.

29th April.—Commonwealth Loan of £35,000,000 opened. Terms  $2\frac{1}{2}$  per cent., maturing 1946 or  $3\frac{1}{2}$  per cent., maturing 1950–56 issued at par. Closed 19th May, oversubscribed by £860,000.

2nd May.—New petrol ration announced to operate from 1st June.

10th May.—New South Wales Labour Party successful at State elections.

16th May.—Closing of Commonwealth £13,500,000 Conversion Loan in London; £8,200,000 converted, balance to be redeemed on 1st October.

27th May.—New regulation restricting the transfer of skilled workers from one job to another.

9th June.—Five-year merchant shipbuilding plan announced. Sixty ships to be built of 5,000 tons gross in four States: South Australia, New South Wales, Queensland and Victoria.

13th June.—Extension of Moratorium Regulations protecting members of the forces and their dependants.

18th June.—Second advance of 4d. a bushel on 1940–41 season's wheat, making total advance 3s. 4d. for bagged and 3s. 7½d. for bulk both less freight, also a final advance of 1½d. bushel on 1939–40 pool, making the total advanced 3s. 6½d. for bagged and 3s. 4½d. for bulk wheat.

19th June.—Newsprint rationed to 55 per cent. of pre-war level.

26th June.—Prime Minister announced plans for more effective war effort with re-organization of Commonwealth Cabinet and administration; Cabinet divided into a War Cabinet and Economic and Industrial Committee; five new Departments formed—Aircraft Production, Transport, War Organization of Industry, Home Security, and External Territories; seven Parliamentary Committees appointed—War Expenditure, Social Security, Profits, Man-power and Resources, Broadcasting, Taxation and Rural Industries.

27th June.—Commonwealth Government's proposal for uniform taxation rejected by State Governments.

30th June.—Further restrictions on imports from non-sterling countries.

1st July.—Commonwealth Child Endowment commenced. Restrictions on imports from sterling countries.

4th July.—Capital Issues Regulations restricting the sale of land.

9th July.—Commonwealth Revenue in 1940-41 amounted to £150,482,000.

15th July.—Petrol—Government control of imports, storage and distribution.

21st July.—Visit of Australian delegation to the United States to discuss trade proposals.

22nd July.—Commonwealth £3,000,000 Conversion Loan closed in London.

25th July.—Returned members of A.I.F. awaiting employment to receive for maximum period of three months, £2 2s. per week for single and £3 per week for married men plus 7s. 6d. per week for each child with maximum of £4 2s. 6d. per week.

26th July.—Application of sanctions against Japan; Japanese balances in Australia "frozen" under exchange control regulations.

29th July.—First payment of Commonwealth Child Endowment.

7th August.—Division of import procurement established in Sydney in connexion with lend-lease goods from the United States of America.

9th August.—Loan Council decision to reduce States' loan quotas from £24,000,000 to £20,000,000.

12th August.—Atlantic Charter signed by Mr. Roosevelt and Mr. Churchill.

26th August.—War-workers Housing Trust established.

28th August.—Honorable A. Fadden succeeded Right Honorable R. G. Menzies as Prime Minister. Sir Frederic Eggleston left Australia as first Australian Minister to China.

17th September.—Commonwealth Grants Commission recommended grants for 1941-42; South Australia £1,150,000, Western Australia £630,000 and Tasmania £520,000.

22nd September.—Commonwealth Bank and trading banks reduced by 5s. per cent. all fixed deposit rates excepting for three monthly period.

25th September.—Commonwealth Budget for 1941-42 introduced by Mr. Fadden provided for total expenditure of £322,000,000 including £217,000,000 for war purposes. Revenue estimated at £170,000,000 including £7,000,000 from increased taxation and postal charges; Expenditure on non-war services estimated at £102,000,000. Loan expenditure estimated at £152,000,000 of which £25,000,000 was compulsory loan, designed to make the total levy on incomes uniform in the States.

3rd October.—Fadden Government defeated on Budget.

7th October.—Mr. Curtin formed Labour Ministry. Opening of Commonwealth £100,000,000, cash and conversion loan, terms 2½ per cent., maturing 1945-46 and 3½ per cent., maturing 1950-57.

29th October.—Revised Budget introduced by Mr. Chifley provided for total expenditure of £325,000,000 including £221,000,000 for war purposes. Revenue estimated at £186,000,000 including £22,000,000 from increased taxation and postal charges. Expenditure on non-war services estimated at £103,480,000, Loan expenditure at £139,000,000; Service pay and invalid and old-age pensions increased, Income Tax increased (on incomes over £1,500), increases in war-time company tax, sales tax, customs and excise duties and a gift duty introduced.

Regulations announced for war-time banking control—All trading banks to be licensed and all surplus investible funds to be lodged with Commonwealth Bank, profits to be limited and full statements of accounts to be furnished to Commonwealth Bank.

12th November.—Report of Board of inquiry into Hire purchase and Cash order transactions.

17th November.—£100,000,000 loan filled : £66,000,000 converted out of £73,000,000 ; Cash amounted to £34,000,000.

27th November.—Loss of £1,500,000 on Apple and Pear acquisition scheme for 1941 season.

28th November.—Rent control regulations provided that no dwelling house let at less than £4 4s. per week be at rental greater than that paid on 31st August, 1939 ; evictions subject to approval of Fair Rents Court.

5th December.—First advance on 1941-42 season's wheat crop announced ; 3s. bushel for bagged and 2s. 10d. for bulk, both less freight.

7th December.—War in the Pacific launched by Japanese attack upon the American Naval Base at Pearl Harbour, Hawaii, followed by declaration of war by Japan upon Great Britain and the United States of America.

8th December.—All Japanese Nationals in Australia handed over to Military authorities for internment. Total prohibition of imports of 643 items from all sterling areas excepting New Zealand and British and French Pacific Islands. Transport services placed on emergency basis.

9th December.—Proclamation issued declaring Australia at war with the Japanese Empire as from 5 p.m., 8th December.

11th December.—Late shopping nights abolished.

16th December.—War-tax estimated to yield £20,000,000 in full year imposed at flat rate of 1s. in £ on income of £300 per annum and over falling to 6d. in £ on income of £156 per annum. Company tax increased by 1s. in £.

19th December.—Postponement of State Public Works not essential to war effort pending report by Co-ordinator-General of Works.

20th December.—Compulsory scheme of property insurance against war damage announced.

22nd December.—Commonwealth authority to control all forms of transport.

27th December.—Industrial Relations Council established to advise on industrial matters to consist of eight employers and eight employees representatives with independent chairman.

## 1942.

1st January.—Daylight saving introduced. Clocks advanced by one hour from 2 a.m.

3rd January.—Mr. L. R. McGregor, Commonwealth\*Trade Commissioner in United States, appointed Director-General of War Supplies Procurement in United States.

4th January.—Rabaul (New Britain) raided.

6th January.—Director-General of Aircraft Production appointed.

8th January.—Regulations providing for compensation for War Injuries sustained.

21st January.—Mr. W. C. Wurth appointed Director-General of Man Power.

22nd January.—Rabaul evacuated. Japanese invasion of Territory of New Guinea presumed to have taken place 23rd January, 1942.

26th January.—Announcement of Militia Forces first action against Japanese at Rabaul.

28th January.—Formation of Waterside Employment Committees at various ports. Regulations amended to prohibit erection of new buildings to be used as dwellings and situated within 25 miles of G.P.O., Sydney and Melbourne.

31st January.—Man Power Regulations providing for the direction and control of all persons in employment gazetted. Creation of Directorate-General of Man Power and establishment of National Service Offices.

3rd February.—Port Moresby bombed by Japanese planes.

Regulations gazetted providing for the restriction of the number of University Students to be enrolled.

Loan programme reduced to £12,912,000 for year 1941-42.

16th February.—Announcement of fall of Singapore.



17th February.—Federal Government ordered complete mobilization of all Australia's resources—human and material.

19th February.—Darwin bombed (two raids)—First raids on Australian mainland. Share trading on Stock Exchanges ceased.

20th February.—Regulations gazetted permitting mobilization of services and property.

National Security Regulations gazetted prohibiting transfer of certain property, granting Commonwealth Bank power to fix maximum rates of interest, fixing rates of wages and limiting profits.

23rd February.—Regulations gazetted under National Security Act for introduction of insurance scheme covering war damage—The scheme covers all property in Australian Territory against air raid, enemy attacks on land or damage caused by counter measures including a scorched earth policy.

26th February.—Allied Works Council set up to carry out works for allied forces in Australia. Director-General Hon. E. G. Theodore appointed.

2nd March.—National Security Regulations gazetted permitting employment of women on unskilled work, usually performed by men, in the production of munitions and aircraft.

6th March.—Proclamation issued calling for registration of all men in defence classes IV. Age, 35–45—Married men with children and V. Age 45–60—All men.

9th March.—National Security Regulations gazetted providing for Controller of Minerals Production to operate control and direct the production of minerals.

11th March.—Regulations gazetted providing for registration of all civilians over 16 years of age on 15th March, 1942, and the issue of identity cards.

Resumption of trading in shares on Australian Stock Exchanges.

14th March.—Prime Minister announced presumed loss in Java Sea Battle of H.M.A.S. *Perth* and *Yarra*.

Maximum rates of interest fixed on Savings Banks and fixed deposits, etc.

16th March.—Sale of spirituous liquors limited to two-thirds that of 1941.

18th March.—Appointment and arrival in Australia of General Douglas MacArthur as supreme Commander of Allied Forces in South-West Pacific Area.

23rd March.—Committee reported to Treasurer, recommending scheme for a single Uniform Tax to replace all Commonwealth and State taxes on income.

General Sir Thomas Blamey appointed Commander-in-Chief of all land forces in South-West Pacific Area.

Curfew 8 p.m. to 5 a.m. fixed for aliens in Queensland.

Regulations gazetted providing for control of Cash Orders and Hire Purchase Agreements.

25th March.—National Security Regulations gazetted constituting Women's Employment Board.

26th March.—Land Transport Board constituted and Director-General of Land Transport appointed to provide for the effective control of rail and road transport.

Order published that on and after 31st March, 1942, all employers must obtain consent of man-power authorities before engaging labour.

28th March.—Rationing of Tea introduced providing for 1 oz. per week for each person over 9 years of age.

Announced that large contingents of A.I.F., R.A.A.F., and R.A.N. had returned from Middle East.

29th March.—Daylight saving ceased at 2 a.m.

14th April.—Regulations gazetted providing for the establishment of a Civil Constructional Corps.

Order issued requisitioning earth-moving plant.

16th April.—Prices Regulation Order No. 666—Gross profit margins of all goods pegged at the amounts in money ruling on 15th April, 1942.

20th April.—Sir Owen Dixon appointed Envoy Extraordinary and Minister Plenipotentiary for Australia in the United States.

23rd April.—Regulations gazetted to set up a Central Cargo Control Committee to provide for the orderly and expeditious disposal of goods arriving by sea and to facilitate the speedy loading and discharging of ships.†

28th April.—Australian Food Control Council established as supreme authority for advising Government on all vital aspects of the supply of food for Service and Civil needs.

1st May.—Sales Tax rates of 10 and 20 per cent. increased to 12½ and 25 respectively and the 5 per cent. rate abolished.

4th May.—Battle of the Coral Sea.

5th May.—Allied Supply Council formed.

12th May.—Order issued restricting sales of clothing to 75 per cent. of average weekly sales during 1941 as from 11th May, 1942.

14th May.—Rationing Commission to administer rationing in Australia set up under regulations gazetted.

15th May.—Uniform Income Tax Bills introduced into House of Representatives.

22nd May.—Announced that British Government had agreed to an increase of 15 per cent. in the price to be paid for the 1942-43 wool clip.

29th May.—Uniform Tax Bill passed House of Representatives.

31st May.—Night attack on Sydney Harbour by Japanese submarines four of which were sunk after torpedoing an old ferry.

3rd June.—Uniform Tax Bill passed Senate.

4th June.—Premiers given power to adjust basic wage quarterly with Statistician Index-Numbers, etc., if in accordance with State legislation.

7th June.—Enemy submarine shelled Sydney and Newcastle.

12th June.—Clothing, etc., declared rationed goods and orders issued setting up machinery for rationing and fixing clothing ration scale.

13th June.—Ration coupon books issued.

16th June.—Clothes rationing commenced.

22nd June.—Test of validity of Commonwealth Uniform Taxation scheme begun before Full High Court of Australia.

23rd June.—Order issued under Land Transport Regulations prohibiting interstate rail travel without a permit.

1st July.—Widow's Pensions Act in operation.

3rd July.—Tea rationed from 6th July, 1942, 8 oz. for 5 weeks.

5th July.—Foundation stone of United States Legation at Canberra laid.

20th July.—100th anniversary of the declaration of Sydney as a City.

22nd July.—Enemy male aliens between 18 and 60 years to register for national service; Japanese land at Buna and Gona in Papua.

23rd July.—Full High Court upheld Commonwealth Uniform Taxation Legislation.

31st July.—Announced that Australian Military Regulations had been amended to confer on General MacArthur, C. in C. Allied Forces, South-West Pacific, powers and functions formerly exercised by the Military Board.

Announced that Port Hedland, Western Australia, had been bombed.

1st August.—Regulations under National Security Act gazetted constituting Pool Petroleum Pty. Ltd.

9th August.—Sinking of H.M.A.S. *Canberra* in Solomon Islands announced.

11th August.—Loan programme of £7,328,000 for year 1942-43.

12th August.—100th Anniversary of incorporation of City of Melbourne.

21st August.—Centenary of City of Hobart.

26th August.—Death of H.R.H. the Duke of Kent.

27th August.—Japanese land at Milne Bay, Papua.

29th August.—Orders gazetted providing for rationing of sugar by coupons, 1 lb. per week from 31st August, 1942.

31st August.—Japanese defeated at Milne Bay.

2nd September.—1942-43 Budget presented in Federal Parliament; estimated expenditure over £583,000,000.

14th September.—Announced that His Majesty the King had asked that *Shropshire*, British Government's Gift Cruiser to Australia be renamed *Canberra*.

17th September.—Regulations gazetted prohibiting horse and greyhound racing on the first Saturday of each month and restricting such racing at other times.

24th September.—Black-marketing Bill introduced into House of Representatives.

27th September.—Daylight saving commences, clocks advanced by one hour from 2 a.m.

30th September.—Constitution Amendment Bill introduced into House of Representatives proposing additional powers for Commonwealth.

1st October.—Uniform Entertainment Tax commenced.

2nd October.—Regulations gazetted giving Treasurer control over real estate transactions.

7th October.—Federal Cabinet decided to grant subsidy to dairying industry of £2,000,000 a year to operate from 1st October, 1942.

17th October.—Ministry of Supply and Shipping created.

19th October.—Regulations gazetted limiting hours of work—

Employees under 18 years—48 hours per week.

Employees over 18 years—60 hours per week to 30th November, 1942.

56 hours per week after 30th November, 1942.

Australian Flour Industry Committee set up to control supply and distribution of flour.

23rd October.—Regulations gazetted restricting new manufactures.

26th and 27th October.—Large naval battle fought in Solomons.

28th October.—Restrictions placed on interstate transport of many classes of goods from 29th October, 1942.

30th October.—Australian Meat Industry Commission set up to secure the production of stock and supply of meat to meet needs of forces and civilians in Australia and to provide a surplus for the export to United Kingdom and fighting forces overseas.

3rd November.—Commonwealth £100,000,000 War Austerity Loan launched by Prime Minister.

Financial assistance to be given to University students in certain faculties; assistance to be according to means.

17th November.—A.L.P. Interstate Conference decided to refer to State branches the Prime Minister's proposal to send militiamen to selected areas in South-West Pacific Area.

20th November.—Appointment of University Commission announced.

24th November.—Constitutional Convention held at Canberra.

2nd December.—Constitutional Convention accepts draft bill for reference to State Parliaments for transfer of fourteen specific powers to Commonwealth Parliament.

4th December.—Regulations amended to further restrict sales of real estate.

14th December.—Tea ration increased to 8 oz. for each four-weekly period.

15th December.—Buna village occupied by Allies.

24th December.—Department of Post-War Reconstruction established.

29th December.—Revised order gazetted for control of employment of domestic servants.

### 1943.

12th January.—Superphosphate Industry Committee set up to control supplies of superphosphate.

16th January.—Dr. Coombs appointed Director of Department of Post-War Reconstruction.

19th January.—Announced that 458,161 applications were made for the £100,000,000 Austerity Loan—total subscription £104,635,000.

28th January.—Speed limit of motor cars fixed at 40 miles per hour from 1st February, 1943.



29th January.—Bill to permit use of militia in South-West Pacific Zone introduced by Prime Minister, Rt. Hon. J. Curtin.

1st February.—Federal Basic Wage increases—1s. in New South Wales, Victoria and Western Australia; 2s. in Tasmania.

3rd February.—A. P. Vlasov, first Soviet Minister to Australia, arrived in Sydney.

5th February.—Tasmanian Legislative Council rejects Powers Bill.

17th February.—Announced that Commonwealth Government had decided to place United States imports into Australia on "most favoured" tariff accorded foreign goods.

18th February.—Militia Bill became effective.

2nd and 4th March.—Battle of Bismarck Sea.

3rd March.—War Damage Insurance premiums paid in Australia during 1942 totalled £7,272,645—value of property covered being £2,736,000,000.

Income Tax Assessment Act passed—Increased rates of tax and provision for continuous instalments of tax from wage and salary earners.

20th March.—Regulations for control of production, distribution and consumption of meat issued.

23rd March.—Return of 9th Division announced.

28th March.—Daylight saving ceased 2 a.m.

8th April.—Powers Bill again rejected by Legislative Council of Tasmania.

12th April.—Announced that Australian casualties in New Guinea campaign totalled 6,612—killed or died, 2,110; wounded, 3,833; missing, 269.

13th April.—"Ceiling" prices of nearly all articles pegged at level of prices on 12th April, 1943. Prices to be kept at "ceiling" level by the payment of subsidies and other methods to meet unavoidable increases in prices.

Announced that Australia had a total of 790,000 of gross enlistments in the three fighting services. Of Australia's 5,000,000 men and women between 14 and 65 years of age, 3,400,000 (or 68 per cent.) were in necessary war-time occupations.

15th April.—New egg control executive and advisory committee constituted to control production, distribution and consumption of eggs.

17th April.—All children between ages 14 and 16 years to register for purposes of rationing and to ensure suitable employment on leaving school.

28th April.—Order issued to restrict retail sales of cooking appliances.

20th May.—Regulations for control of agricultural machinery issued.

22nd May.—A.I.F. casualties in Middle East—killed in action, 3,147; wounded, 8,317; missing, 443; prisoners of war, 6,806. Total, 18,713.

25th May.—J. F. Murphy, C.M.G., appointed Controller-General of Food.

5th June.—Second issue of ration coupons made in Australia.

7th June.—Household drapery and butter ( $\frac{1}{2}$  lb. per week) rationed.

11th June.—Prime Minister announced a subsidy to dairy industry at rate of £0.5 million per annum from 1st April, 1943.

23rd June.—First regular airgraph mail arrived from Great Britain.

24th June.—Curtin Government survived by one vote censure motion on use of militia.

Statement by the Treasurer, estimating war expenditure in 1942-43 as £560,000,000 or £120,000,000 over original estimate.

30th June.—Number of branches of trading banks (including head offices) reduced to 2,724 at 30th June, 1943, from 3,508 in June, 1940.

2nd July.—Australian wool cheque for season ended 30th June, 1943, totalled £73,525,280—a record.

13th July.—Royal Commissioner reported that no document concerning matter known as "the Brisbane line" was missing from official files.

14th July.—Premiers Conference decided to establish National Works Council, composed of State representatives with Prime Minister as Chairman. The function of the Council will be to determine post-war works policy.

15th July.—Loan programme for States to be £9,473,000 for 1943-44.

19th July.—Regulations gazetted to set up a Salvage Commission to regulate, control, promote and conduct the collection, treatment, disposal and use of salvage material and service.

30th June.—Navy Minister announced that four trawlers would be available soon for fishing.

4th July.—Announced that Australia's wool, 1943-44 season, was valued at £73,872,000.

5th July.—Announced that over 3,000 claims amounting to £10,000,000 had been lodged with War Damage Commission from property owners in Papua and New Guinea.

15th July.—Hospital benefit scheme approved by Federal Cabinet. Proposed to subsidize all occupied beds in hospitals at 6s. per day. Means test in hospitals to be abolished.

23rd July.—Minister for Commerce stated that 133,000,000 lb. of vegetables were canned in 1943-44, exceeding the target of 112,000,000 lb.

10th August.—Child Endowment cost £12,257,000 in 1943-44 compared with £11,660,000 in 1942-43.

Widow's Pensions cost £2,801,000 in 1943-44 compared with £2,359,000 in 1942-43.

11th August.—Interest rates on fixed deposits reduced.

16th August.—Fuel experts declare that coal position in Australia was so desperate that rationing would not solve the problem—certain industries would have to close down.

19th August.—Referendum held for alteration of Commonwealth Constitution; proposals defeated in four States.

24th August.—Allies enter Paris.

25th August.—Australian Loan Council approved loan programme of States, of £16,584,000 for 1944-45.

4th September.—Commonwealth Statistician reported that since outbreak of war cost of living had increased by 22½ per cent.

7th September.—Budget announced by Treasurer—War Expenditure estimated at £505,000,000, compared with £544,000,000 expended in 1943-44. Revenue estimated at £325,000,000, an increase of £16,000,000 over receipts for year 1943-44.

18th October.—University quotas for 1945 were fixed as follows:—Sydney, 595; Melbourne, 445; Queensland, 185; Adelaide, 200; Western Australia, 120; Tasmania, 44.

6th November.—Announced by Treasurer that Second Victory Loan had been a complete success.

16th November.—India's first High Commissioner arrived in Australia.

30th November.—Australian war casualties at 30th September, 1944 (excluding deaths from natural causes) were as follows: Killed, 17,624; missing, 6,113; prisoners of war, 26,716; and wounded or injured, 33,943—Total, 84,396.

16th December.—Widespread bushfires in New South Wales causing considerable damage.

17th December.—Worst duststorms on record, sweeping over South-eastern Australia.

## APPENDIX.

(Recent information and returns which have come to hand since the various chapters were sent to press are given hereunder).

## CHAPTER III.—GENERAL GOVERNMENT.

## § 2. Parliaments and Elections.

6. The Constitution Alteration (Post-War Reconstruction and Democratic Rights) Bill 1944, p. 64. The number of votes cast for and against the proposed law in each State were as follows :—

State.				Yes.	No.	Informal.
New South Wales	..	..	..	759,211	911,680	23,228
Victoria	..	..	..	597,848	614,487	15,236
Queensland	..	..	..	216,262	375,862	7,444
South Australia	..	..	..	196,294	191,317	4,832
Western Australia	..	..	..	140,399	128,303	3,637
Tasmania	..	..	..	53,386	83,769	2,256
Total	..	..	..	1,963,400	2,305,418	56,633

The result was that only two States—South Australia and Western Australia—were in favour of the proposed alteration.

## § 3. Administration and Legislation.

## 2. Governors-General and Ministries, p. 72.

Recent changes in Governors-General and Commonwealth Ministries are as follows :—

## (a) GOVERNORS-GENERAL.

General the Rt. Hon. ALEXANDER GORE ARKWRIGHT, BARON GOWRIE, V.C., P.C., G.C.M.G., C.B., D.S.O. From 23rd January, 1936, to 30th January, 1945.

His Excellency Major-General Sir WINSTON JOSEPH DUGAN, G.C.M.G., C.B., D.S.O. From 5th September, 1944, to 30th January, 1945. (Acting).

His Royal Highness, HENRY WILLIAM FREDERICK ALBERT, DUKE OF GLOUCESTER, K.G., P.C., K.T., K.P., G.C.B., G.C.M.G., G.C.V.O., General in the Army, Air Chief Marshal in the Royal Air Force, One of His Majesty's Aides-de-Camp. From 30th January, 1945.



## (b) MINISTRIES.

(xxiv) CURTIN MINISTRY, 21st September, 1943, to 2nd February, 1945.

(xxv) CURTIN MINISTRY, 2nd February, 1945.

## (c) SECOND CURTIN GOVERNMENT, FROM 2ND FEBRUARY, 1945.

(The State from which each Minister comes is added in brackets.)

DEPARTMENTS.	MINISTERS.
*Prime Minister and Minister for Defence ..	Rt. Hon. J. Curtin (W.A.).
*Minister for the Army .. .. .	Rt. Hon. F. M. Forde (Qld.).
*Treasurer .. .. .	Hon. J. B. Chifley (N.S.W.).
*Attorney-General and Minister for External Affairs	Rt. Hon. H. V. Evatt, LL.D., D.Litt., K.C. (N.S.W.).
*Vice-President of the Executive Council ..	Hon. J. A. Beasley (N.S.W.).
*Minister for the Navy, Minister for Munitions and Minister for Aircraft Production	Hon. N. J. O. Makin (S.A.).
Minister for Trade and Customs .. ..	Senator The Hon. R. V. Keane (Vic.).
Minister for Labour and National Service ..	Hon. E. J. Holloway (Vic.).
*Minister for Air and Minister for Civil Aviation	Hon. A. S. Drakeford (Vic.).
Minister for Commerce and Agriculture ..	Hon. W. J. Scully (N.S.W.).
Minister for Supply and Shipping ..	Senator The Hon. W. P. Ashley (N.S.W.).
*Minister for Post-War Reconstruction ..	Hon. J. J. Dedman (Vic.).
Minister for the Interior .. ..	Senator The Hon. J. S. Collings (Qld.).
Minister for Transport and Minister for External Territories	Hon. E. J. Ward (N.S.W.).
Minister for Health and Minister for Social Services	Senator The Hon. J. M. Fraser (W.A.).
Minister for Repatriation and Minister in Charge of War Service Homes	Hon. C. W. Frost (Tas.).
Minister for Home Security and Minister for Works	Hon. H. P. Lazzarini (N.S.W.).
Postmaster-General .. .. .	Senator The Hon. D. Cameron (Vic.).
Minister for Information .. ..	Hon. A. A. Calwell (Vic.).

\* War Cabinet.

## CHAPTER V.—TRANSPORT AND COMMUNICATION.

## B. RAILWAYS.

## § 1. General.

8. Summary of Operations, p. 112.—The following tables give a summary of the operations of all Government railways open for general traffic during the years 1942-43 and 1943-44.

## GOVERNMENT RAILWAYS.

Particulars.	C'wealth.	N.S.W.	Vic.	Q'land. (a)	S. Aust.	W. Aust.	Tas.	Aust.
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1942-43.

Route Miles Open	..	2,201	6,127	4,758	6,567	2,549	4,381	642	27,225
Gross Revenue—									
Coaching	£'000	960	12,766	7,647	4,674	1,703	1,360	315	29,425
Goods and Live-stock	..	2,712	18,240	8,140	12,732	3,650	2,881	490	48,845
Miscellaneous	..	74	3,866	1,242	621	458	177	38	6,476
Total Revenue	..	3,746	34,872	17,029	18,027	5,811	4,418	843	84,746
Working Expenses	..	2,171	27,343	14,040	11,400	4,661	3,448	964	64,027
Train-miles Run	'000	3,473	39,000	18,437	19,851	6,792	6,340	2,217	96,110
Gross Revenue per train-mile	d.	258.88	214.60	221.69	217.95	205.32	167.24	91.21	211.62
Working expenses per train-mile	..	150.02	168.27	182.77	137.83	164.69	130.51	104.39	159.88
Working Expenses per cent. on Gross Revenue	%	57.95	78.41	82.44	63.24	80.21	78.03	114.45	75.55
Passenger-journeys	'000	463	237,441	195,830	33,263	30,864	17,092	3,324	518,277
Coal, Coke and Shale carried	'000 tons	9	(b)	(b)	1,027	188	264	96	(b)
Other Minerals	..	13	(b)	(b)	436	494	176	196	(b)
Live-stock	..	37	800	741	560	242	143	35	2,558
Other Goods	..	414	18,846	8,018	4,683	2,506	1,922	655	37,044
Total Freight	..	473	19,646	8,759	6,706	3,430	2,505	982	42,501

1943-44.

Route Miles Open	..	2,201	6,128	4,748	(c)	2,547	4,381	642	27,144
Gross Revenue—									
Coaching	£'000	941	12,866	7,174	4,861	1,671	1,426	310	29,249
Goods and Live-stock	..	2,434	18,408	7,485	10,841	3,721	2,789	516	46,194
Miscellaneous	..	84	4,027	1,223	728	587	172	45	6,866
Total Revenue	..	3,459	35,301	15,882	16,430	5,979	4,387	871	82,309
Working Expenses	..	2,521	27,535	13,214	13,163	5,213	3,796	1,136	66,578
Train-miles Run	'000	3,453	37,100	16,413	19,794	6,777	6,044	2,185	91,766
Gross Revenue per train-mile	d.	240.46	228.36	232.23	199.21	211.75	174.20	95.66	215.27
Working expenses per train-mile	..	175.21	178.13	193.21	156.60	184.61	150.74	124.80	174.12
Working Expenses per cent. on Gross Revenue	%	72.87	78.00	83.20	80.12	87.18	86.54	130.46	80.89
Passenger-journeys	'000	522	250,566	194,138	38,154	27,356	18,773	3,131	532,640
Coal, Coke and Shale carried	'000 tons	6	(b)	(b)	1,000	193	257	(b)	(b)
Other Minerals	..	14	(b)	(b)	334	455	145	280	(b)
Live-stock	..	45	800	580	577	256	150	32	2,440
Other Goods	..	451	18,603	7,714	4,656	2,744	2,008	666	36,842
Total Freight	..	516	19,403	8,294	6,567	3,648	2,560	978	41,966

(a) Includes Uniform Gauge Railway. (b) Not available separately. (c) Excludes Uniform Gauge Railway.

## D. MOTOR VEHICLES.

5. Motor Vehicles on the Register, p. 129.—Motor vehicles registered at 30th June, 1943 and 1944, were as follows:—

## MOTOR VEHICLES REGISTERED AT 30th JUNE, 1943 AND 1944.

(Excluding Defence Service Vehicles.)

State or Territory.	Motor Cars.	Commercial Vehicles.	Motor Cycles.	All Vehicles.	
				No.	Per 1,000 of Population.
30TH JUNE, 1943.					
New South Wales ..	174,537	73,072	14,164	261,773	92.1
Victoria.. ..	131,417	(a)85,937	16,275	233,629	118.0
Queensland .. ..	64,705	45,703	5,432	115,840	110.2
South Australia ..	53,933	22,719	5,977	82,629	134.2
Western Australia ..	29,805	21,429	3,936	55,170	115.0
Tasmania .. ..	15,844	5,582	2,454	23,880	98.5
Northern Territory ..	152	1,064	13	1,229	236.3
Australian Capital Territory	1,349	427	70	1,846	130.9
Australia .. ..	471,742	255,933	48,321	775,996	107.3
30TH JUNE, 1944.					
New South Wales ..	182,287	79,000	14,897	276,184	96.2
Victoria.. ..	136,842	(a)89,354	17,965	244,161	122.2
Queensland .. ..	68,247	50,788	6,103	125,138	117.5
South Australia ..	57,366	24,008	6,553	87,927	141.4
Western Australia ..	30,370	22,791	4,327	57,488	118.4
Tasmania .. ..	16,730	6,321	2,583	25,634	104.4
Northern Territory ..	174	1,570	35	1,779	343.5
Australian Capital Territory	1,430	437	97	1,909	132.2
Australia .. ..	493,391	274,269	52,560	820,220	112.3

(a) Includes vehicles registered as primary producers' vehicles.

6. New Vehicles Registered, p. 131. New vehicles registered during the years 1942-43 and 1943-44 were as follows:—

## REGISTRATIONS OF NEW VEHICLES DURING THE YEARS ENDED JUNE, 1943 AND 1944.

(Excluding Defence Service Vehicles.)

Vehicles.	N.S.W.	Vic.	Q'land.	S.A.(b)	W.A.	Tas.	A.C.T.	Total.
1942-43								
Motor Cars .. ..	654	852	332	225	220	69	8	2,360
Commercial Vehicles, etc. ..	781	(a)1,153	548	293	215	91	3	3,084
Motor Cycles .. ..	172	83	32	39	57	3	3	389
<b>Total .. ..</b>	<b>1,607</b>	<b>2,088</b>	<b>912</b>	<b>557</b>	<b>492</b>	<b>163</b>	<b>14</b>	<b>5,833</b>
1943-44.								
Motor Cars .. ..	188	527	22	36	21	29	2	825
Commercial Vehicles, etc. ..	3,868	(a)3,306	2,644	1,176	1,110	523	8	12,635
Motor Cycles .. ..	137	70	19	5	109	..	..	340
<b>Total .. ..</b>	<b>4,193</b>	<b>3,903</b>	<b>2,685</b>	<b>1,217</b>	<b>1,240</b>	<b>552</b>	<b>10</b>	<b>13,800</b>

(a) Includes vehicles registered as primary producers' vehicles.

(b) Excludes Northern Territory.



## F. AVIATION.

4. Statistical Summary, p. 133.—The following table gives a summary of operations for Australia in 1942-43 and 1943-44:—

## CIVIL AVIATION, AUSTRALIA, 1942-43 AND 1943-44.

Year.	Registered Aircraft Owners. (a)	Registered Aircraft. (a)	Licensed Pilots. (a).		Hours Flown.	Approx. Mileage.	Passengers Carried.	Weight of Goods Carried.	Weight of Mails Carried. (b)	Accidents.	
			Private.	Commercial.						Killed.	Injured.
	No.	No.	No.	No.	No.	Miles.	No.	'000 lb.	'000 lb.	No.	No.
1942-43	128	184	171	233	58,185	7,517	133,525	2,066	1,660	4	3
1943-44	116	185	159	305	84,274	10,082	235,775	3,132	2,438	1	1

(a) At 30th June. (b) Includes gross weight of oversea mails.

NOTE.—Figures relate to civil operations of larger organizations only.

## G. POSTS, TELEGRAPHS AND TELEPHONES.

2. Wireless Licences, p. 152.—The following tables show the number of each class of licence issued in each State and Territory at 30th June, 1943 and 1944:—

## WIRELESS LICENCES IN FORCE AT 30th JUNE, 1943 AND 1944.

Station Licence.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Coast ..	1	1	6	1	5	3	1	..	18
Ship ..	65	79	8	5	1	1	..	..	159
Aircraft ..	5	9	8	4	2	..	1	..	29
Land ..	28	3	80	41	77	18	47	2	296
Broadcasting (a)	33	19	19	8	10	8	..	1	98
Broadcast Listeners ..	549,318	390,950	177,846	151,058	97,785	49,910	200	2,726	1,419,793
Portable ..	7	..	4	3	4	..	4	3	25
Special ..	99	131	27	13	12	7	1	1	291
Total ..	549,556	391,192	177,998	151,133	97,896	49,947	254	2,733	1,420,709

## 30th JUNE, 1944.

Coast ..	1	1	6	1	5	3	1	..	18
Ship ..	64	78	10	7	1	..	..	..	160
Aircraft ..	11	11	7	4	2	..	..	..	35
Land ..	30	3	92	51	82	9	62	2	331
Broadcasting (a)	33	19	19	8	10	8	..	1	98
Broadcast Listeners ..	557,302	409,325	180,090	155,046	99,246	50,356	207	2,730	1,454,302
Portable ..	9	..	5	4	3	..	6	..	27
Special ..	119	247	29	14	44	5	1	1	460
Total ..	557,569	409,684	180,258	155,135	99,393	50,381	277	2,734	1,455,431

(a) There are also 30 stations operated by the National Broadcasting Service, including 3 short-wave stations (VLR, Lyndhurst, Vic.; VLQ, Brisbane, Qld.; and VLW, Perth, Western Australia).

## CHAPTER XII.—POPULATION.

2. Growth and Distribution, p. 261.—The following table shows the revised population for each State and Territory for the years 1939 to 1942 and the population as at 30th June, 1943 :—

## ESTIMATED POPULATION, 1939 TO 1943 : REVISED.

31st December—	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
MALES.									
1939 ..	1,391,351	931,413	532,410	299,2	246,413	122,863	4,231	6,877	3,534,813
1940 ..	1,398,288	948,654	537,730	298,072	248,146	123,381	4,258	7,568	3,566,097
1941 ..	1,405,702	967,107	539,967	302,368	248,704	122,038	4,078	7,483	3,597,447
1942 ..	1,421,294	973,281	537,584	304,253	250,750	122,465	3,972	7,459	3,621,058
1943(a) ..	1,423,945	979,384	543,426	305,206	250,197	122,323	4,053	6,996	3,635,530
FEMALES.									
1939 ..	1,371,438	954,843	486,723	299,655	222,420	119,661	1,981	5,792	3,462,513
1940 ..	1,384,703	969,713	493,795	301,326	224,514	119,982	2,041	6,518	3,502,592
1941 ..	1,396,312	984,308	500,020	305,479	225,613	119,643	1,492	6,908	3,539,775
1942 ..	1,411,839	994,945	502,952	308,816	229,132	119,686	980	7,214	3,575,564
1943(a) ..	1,417,282	1,000,905	508,210	310,278	229,427	120,022	1,091	7,119	3,594,334

## PERSONS.

1939 ..	2,762,789	1,886,256	1,019,133	598,910	468,833	242,524	6,212	12,669	6,997,326
1940 ..	2,782,991	1,918,367	1,031,525	599,374	472,660	243,363	6,299	14,086	7,068,689
1941 ..	2,802,014	1,951,415	1,039,987	607,8	474,317	241,681	5,570	14,391	7,137,222
1942 ..	2,833,133	1,968,226	1,040,536	613,069	479,882	242,151	4,952	14,673	7,196,622
1943(a) ..	2,841,227	1,980,289	1,051,636	615,484	479,624	242,345	5,144	14,115	7,229,864

(a) At 30th June.

3. Mean Population, p. 264.—The following tables show the revised mean population as follows :—

## TOTAL MEAN POPULATION—CALENDAR YEARS 1939 TO 1942.

Year ended 31st December—	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1939 ..	2,748,192	1,881,854	1,013,710	596,371	465,531	238,097	5,999	12,092	6,961,846
1940 ..	2,772,185	1,903,753	1,026,124	599,119	470,922	240,447	6,255	13,556	7,032,361
1941 ..	2,791,169	1,936,725	1,037,416	602,119	473,819	239,824	6,276	14,705	7,102,053
1942 ..	2,818,269	1,964,838	1,037,972	610,813	478,722	240,732	4,890	14,627	7,170,863

## TOTAL MEAN POPULATION—FINANCIAL YEARS 1940 TO 1943.

Year ended 30th June—	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1940 ..	2,760,591	1,889,864	1,020,455	598,379	468,510	239,291	6,214	12,859	6,996,163
1941 ..	2,782,455	1,920,422	1,032,303	599,309	472,811	240,372	6,298	14,236	7,068,206
1942 ..	2,802,393	1,953,589	1,038,130	607,288	475,830	239,898	5,574	14,572	7,137,274
1943 ..	2,830,866	1,971,126	1,042,931	612,921	480,196	241,420	4,956	14,578	7,198,994

## CHAPTER XIII.—VITAL STATISTICS.

1. Number and Rates, p. 316, etc.—The following table shows particulars of births, deaths, natural increase, marriages and infant deaths for the years 1942 and 1943:—

## BIRTHS, DEATHS, MARRIAGES AND INFANT DEATHS: 1942 AND 1943.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1942—Births ..	52,647	35,927	21,166	11,278	9,901	5,305	92	392	136,708
Rate (a) ..	18.68	18.28	20.39	18.46	20.68	22.04	18.81	26.80	19.06
1943—Births ..	57,265	39,117	23,234	13,145	10,481	5,597	80	376	149,295
Rate (a) ..	20.16	19.75	22.09	21.36	21.85	23.10	15.55	26.64	20.65
1942—Deaths ..	29,219	21,973	9,622	6,712	5,076	2,430	83	76	75,191
Rate (a) ..	10.37	11.18	9.27	10.99	10.60	10.09	16.97	5.20	10.49
1943—Deaths ..	28,870	21,327	10,576	6,482	4,587	2,527	49	68	74,486
Rate (a) ..	10.16	10.77	10.06	10.53	9.56	10.43	9.53	4.82	10.30
1942—Natural Increase ..	23,428	13,954	11,544	4,566	4,825	2,875	9	316	61,517
Rate (a) ..	8.31	7.10	11.12	7.47	10.08	11.95	1.84	21.60	8.57
1943—Natural Increase ..	28,395	17,790	12,658	6,603	5,894	3,070	31	308	74,809
Rate (a) ..	10.00	8.98	12.03	10.83	12.29	12.67	6.02	21.82	10.35
1942—Marriages ..	34,533	23,636	11,722	8,129	5,441	2,431	53	115	86,060
Rate (a) ..	12.25	12.93	11.29	13.31	11.37	10.10	10.84	7.86	12.00
1943—Marriages ..	26,302	18,356	9,979	6,263	4,528	2,102	46	97	67,673
Rate (a) ..	9.26	9.27	9.49	10.18	9.44	8.67	8.94	6.87	9.36
1942—Infantile Deaths ..	2,116	1,497	736	448	365	225	4	9	5,400
Rate (b) ..	40.19	41.67	7.73	39.72	36.86	42.41	43.48	22.96	39.50
1943—Infantile Deaths ..	2,072	1,399	878	482	342	227	6	7	5,413
Rate (b) ..	36.18	35.76	37.79	36.67	32.63	40.56	75.00	18.62	36.26

(a) Number per 1,000 of mean population; 1943 rates are preliminary.  
 deaths under 1 year per 1,000 of live births registered.

(b) Number of

## CHAPTER XV.—LABOUR, WAGES AND PRICES.

2. Unemployment of Members of Trade Unions, p. 484.—The following are the percentages of unemployment in each State for the four quarters of 1943 and 1944.

## UNEMPLOYMENT OF MEMBERS OF TRADE UNIONS, PERCENTAGES.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1943—							
March Quarter ..	1.4	0.8	1.5	1.0	1.6	1.3	1.2
June ..	1.3	0.6	1.3	1.0	1.5	1.2	1.1
September ..	1.3	0.7	1.1	0.9	1.7	1.2	1.1
December ..	1.4	0.7	0.9	0.8	1.4	1.4	1.1
1944—							
March ..	1.3	0.7	0.8	0.9	1.5	0.7	1.0
June ..	1.9	0.9	0.7	1.3	1.9	0.7	1.4
September ..	1.6	0.8	0.8	0.9	1.2	0.9	1.2
December ..	1.6	0.9	0.6	0.9	1.2	0.7	1.2

4. Summary of Industrial Disputes, p. 491.—The following table shows particulars of industrial disputes in each State during the year 1943:—

## INDUSTRIAL DISPUTES, 1943.

State.	Number.	Estab- lish- ments In- volved.	Workpeople Involved.			Working Days Lost.			Esti- mated Loss in Wages.
			Di- rectly.	Indi- rectly.	Total.	New Dis- putes.	Old Dis- putes.	Total.	
New South Wales	689	2,771	250,754	5,623	256,377	720,275	76,236	796,511	£ 971,069
Victoria ..	40	1,070	19,042	217	19,259	61,902	14,784	76,686	65,409
Queensland ..	20	114	8,990	302	9,292	54,699	4,196	58,895	62,629
South Australia ..	24	442	7,602	841	8,443	19,420	..	19,420	13,490
Western Australia	10	82	1,594	950	2,544	37,248	1,190	38,438	40,733
Tasmania ..	2	2	46	142	188	201	..	201	176
Australia ..	785	4,481	288,028	8,075	296,103	893,745	96,406	990,151	1,153,506



**CHAPTER XIX.—MANUFACTURING INDUSTRY.****SUMMARY FOR 1942-43, p. 647.**

Particulars.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1. Factories .. No.		10,110	8,738	2,641	2,134	1,799	992	26,414
2. Hands employed (a) .. "		315,524	262,358	64,292	72,748	25,813	18,310	759,045
3. Wages paid (b) .. £		88,900,826	73,035,253	16,737,545	19,243,200	6,477,113	4,472,816	208,866,843
4. Value of fuel used .. £		12,307,663	6,514,447	2,105,774	2,469,301	1,437,621	791,713	25,626,522
5. " materials used .. £		207,599,130	149,630,126	55,063,141	36,745,047	13,845,868	9,836,766	472,720,078
6. " production .. £		153,682,262	121,391,367	29,044,560	28,354,359	11,454,057	8,075,451	352,002,056
7. " output of fact's. £		373,489,055	277,035,940	86,213,475	67,568,707	26,737,549	18,703,930	850,348,656
8. " land & buildings £		72,622,902	52,642,052	13,159,146	17,473,537	6,770,121	4,920,195	167,593,947
9. " plant & machinery. £		73,121,771	51,963,258	18,793,878	17,848,070	7,105,019	8,133,330	176,965,326

(a) Average over whole year; includes working proprietors.

(b) Excludes amounts drawn by working proprietors.

**CHAPTER XXI.—PASTORAL PRODUCTION.****NUMBER OF LIVE STOCK.**

31st Mar.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Terr.	A.C.T.	Australia.
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**Pigs, pp. 749, 843.**

1944 ..	561,294	337,878	450,391	186,007	163,876	46,427	191	657	1,746,721
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**HORSES, p. 753.**

1944 ..	465,672	277,662	387,018	154,102	106,743	26,317	30,534	1,151	1,449,199
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**CATTLE, p. 756.**

1944 ..	3,102,295	2,013,033	6,524,550	414,997	870,939	230,127	978,569	7,890	14,142,400
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**SHEEP, p. 759.**

1944 ..	56,817,300	19,220,157	23,255,584	10,359,669	11,012,936	2,187,799	25,575	274,642	123,173,962
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**WOOL (AS IN THE GREASE) PRODUCED, (lb.) p. 764.**

Season									
1943-44	539,302,112	199,810,173	193,992,970	115,464,449	97,600,000	17,924,477	308,000	..	1,164,402,181
	(a)				(b)				

(a) Includes A.C.T.

(b) For year ended previous December.

**CHAPTER XXIII.—FARMYARD, DAIRY AND BEE PRODUCTS.****BUTTER, PRODUCTION (lb.) p. 846.**

1943-44	92,197,000	112,255,000	103,071,000	20,476,000	15,074,000	9,723,000	..	14,000	352,810,000
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**CHEESE, (lb.) p. 846.**

1943-44	5,649,000	26,750,000	24,093,000	19,817,000	1,739,000	2,262,000	..	..	80,310,000
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**BACON AND HAM, (lb.) p. 846.**

1943-44	24,268,000	21,170,000	28,017,000	10,889,000	9,718,000	2,724,000	..	500	96,786,500
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(a) Subject to revision.

## GENERAL INDEX.\*

*Note.—This index is followed by a list of maps, graphs and diagrams, also a list of special articles, etc., in previous issues of the Official Year Book. Area, population, etc., of particular localities are indexed under the locality concerned. Where the subject matter extends continuously over more than one page the first page only is indexed.*

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